

Environmental Protection Operations Directorate
Prairie & Northern Region
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ECCC File: 6200 000 015/003
NWB File: 3BM-KIM1929



July 11, 2023

via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 3BM-KIM1929 – Government of Nunavut – Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Water Licence Amendment

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned water licence.

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 preparedness and emergencies. 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: Wetland Treatment Area

Reference(s)

- Design Development Report: New Wastewater Treatment Facility – Hamlet of Kimmirut (Dillon Consulting; January 2023)

Comment

Sections 1.0 (Introduction) and 6.2 (Wetland Treatment Area) of the design report indicate that other secondary treatment options will be considered in addition to wetlands. Per Section 6.2,



Dillon Consulting has identified concerns with the feasibility of wetland treatment. An update should be provided to clarify whether these concerns have been resolved.

ECCC Recommendation(s)

Regarding the Design Development Report for the new Wastewater Treatment Facility, ECCC requests that the Licensee:

- i) Clarify whether any other secondary treatment options are currently being considered in addition to wetlands and, if so, describe any such current options.
- ii) Describe whether and how concerns raised in the report regarding the feasibility of wetland treatment have been resolved.

2. Topic: Effluent monitoring at KIM-3

Reference(s)

- Letter from Hamlet of Kimmirut to Nunavut Water Board re summary of proposed amendment (June 6, 2023)

Comment

The June 6, 2023, letter from the Hamlet of Kimmirut to the Nunavut Water Board summarizes the proposed amendment. Among the proposed changes, the Licensee requests that KIM-5 (effluent at outlet of wetland treatment area) be established as the compliance point and that KIM-3 be established as a monitoring station for the effluent discharged from the lagoon into the wetland treatment area. Therefore, the Licensee is requesting that KIM-3 not act as a compliance point and no effluent limits be applied to KIM-3 because it represents partially treated effluent.

ECCC agrees that, in addition to monitoring effluent quality at the proposed compliance point (i.e., KIM-5), it is important to retain monitoring at KIM-3 to assess and track lagoon treatment performance.

ECCC Recommendation(s)

ECCC recommends that monitoring be retained at KIM-3 for information and analysis purposes.

3. Topic: Solid Waste Management

Reference(s)

- Compliance Plan for water licence 3BM-KIM1929 (June 2023)
- Solid Waste Management for Northern and Remote Communities (ECCC; March 2017)

Comment

In response to non-compliance items regarding solid waste, the Compliance Plan indicates a study will be completed to identify improvements and alternatives to current solid waste management and disposal practices.

ECCC Recommendation(s)

ECCC supports the Hamlet's efforts to improve solid waste management and recommends consulting ECCC's planning and technical guidance document "Solid Waste Management for Northern and Remote Communities" to inform the waste management study described in the Compliance Plan and support responsible solid waste management.

A summary and a link to the full document are available on Environment and Climate Change Canada's website at:

<http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=97182135-1>

4. Topic: Species at Risk and Migratory Birds

Reference(s)

- NIRB Screening Decision Report (April 2023)

Comment

The Proponent is applying for an amendment to the water licence which also includes constructing a new lagoon cell. The Proponent did not mention mitigations for Species at Risk (SAR) or Migratory Birds in the Water Licence Amendment documents.

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. The killing, harming or harassing of listed species as well as the damage and destruction of their residences is prohibited under SARA.

In the territories, the prohibitions apply automatically to:

- Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on lands under the authority of the federal Minister of Environment.
- Migratory Birds (as defined under the Migratory Birds Convention Act [MBCA]) everywhere they are found.

These prohibitions can apply elsewhere if there is an order put in place. The destruction of critical habitat of species listed under Schedule 1 of SARA is prohibited on all lands identified within the critical habitat protection order for the species.

Table 1 in Appendix A contains a list of 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.

ECCC Recommendation(s)

ECCC recommends the Proponent provide mitigations for SAR and migratory birds. As species are assessed and listed on a regular basis, ECCC recommends the Proponent:

- i) Consult the [Species at Risk registry](#) to obtain the most current information for their operations.

- ii) Consult the Government of Nunavut to identify appropriate mitigation and/or monitoring measures to avoid and lessen project effects to species under their management responsibility.

Other useful resources include: [ECCC's Guidelines to Avoid Harm to Migratory Birds](#), [Fact Sheet Nest Protection Under the Migratory Birds Regulations, 2022](#) and [Frequently Asked Question, Migratory Birds Regulations, 2022](#).

If you need more information, please contact Abigayle Blackmore at (780) 239-3894 or Abigayle.Blackmore@ec.gc.ca.

Sincerely,

[original signed by]

Abigayle Blackmore
Environmental Assessment Officer

Attachment(s): Appendix A: Species at Risk Table

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

Appendix A. Species at Risk (SAR) 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 1: Terrestrial Species at Risk potentially interacting with project components.

Terrestrial Species at Risk ¹	Scientific Name	COSEWIC Designation	SARA Status ¹	Primary Management Responsibility ²	Available Recovery Documents
Caribou (Barren-ground population)	<i>Rangifer tarandus</i>	Threatened (2016)	No Status (Under Consideration for Addition)	Government of Nunavut	
Harlequin Duck (Eastern population)	<i>Histrionicus histrionicus</i>	Special Concern (2013)	Special Concern (2003)	Environment and Climate Change Canada	
Ivory Gull	<i>Pagophila eburnea</i>	Endangered (2006)	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 (2007)	Endangered (2012)	Environment and Climate Change Canada	Recovery Strategy Critical Habitat Description
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Special Concern (2014)	Special Concern (2019)	Environment and Climate Change Canada	Management Plan*
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 the Northwest Territories Government. 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