

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

ECCC File: 6200 000 008/017
NWB File: 1BR-RAN2131



July 15, 2022

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: 1BR-RAN2131 – Nunatta Environmental Services – Rankin Inlet Landfarm Project – Type B Amendment Application

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

ECCC is providing technical, science-based information and knowledge based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*. These comments are intended to inform the assessment of this project's potential effects in the receiving environment and on valued ecosystem components. Any comments received from ECCC in this context do not relieve the proponent of its obligations to respect all applicable federal legislation.

The following comments are provided:

1. Timeline for Expansion Facility Closure

Reference(s)

- Amendment to Rankin Inlet Landfarm, Supplement Information Guideline, Operation and Maintenance Plan – Existing Licence # 1BR-RAN2131 Dated March 7, 2022

Comment

The term of the licence is until 2031, but the “Supplement Information Guideline, Operation and Maintenance Plan” identifies the number of years requesting for water licence as 5 years.

It is unclear if the intent is to have the landfarm expansion as a temporary facility. If so, plans for reclamation and closure should be included in the licence amendment application.



ECCC Recommendation(s)

ECCC requests clarification of the service life planned for the landfarm expansion, and what the timeline will be for closure planning.

2. Groundwater Monitoring Wells

Reference(s)

- Amendment to Rankin Inlet Landfarm, Supplement Information Guideline, Operation and Maintenance Plan – Existing Licence # 1BR-RAN2131 Dated March 7, 2022; Section 1.3 Runoff Management

Comment

Groundwater contamination will be monitored using monitoring wells. The design diagram for the existing landfarm shows three piezometers (presumably existing) but the plan does not identify where the new ones will be installed. It is unclear if there is a good understanding of the direction of groundwater flow in relation to the landfarm site.

ECCC Recommendation(s)

ECCC requests clarification of the location and number of additional piezometers that will be installed, and the rationale for the chosen locations .

3. Remediation Objectives

Reference(s)

- Amendment to Rankin Inlet Landfarm, Supplement Information Guideline, Operation and Maintenance Plan – Existing Licence # 1BR-RAN2131 Dated March 7, 2022; Section 1.5 Annual Water/Soil Quality Remediation Objectives

Comment

This section of the plan states that “The objective of our sample procedure (AS ATTACHED) is to obtain commercial levels of petroleum hydrocarbons in water/soil as a minimum. Based on the GN and CCME Guidelines as applicable below” then follows with a set of lab data sheets for berm water samples taken September 24, 2021. It would be useful to have the actual guidelines or target remediation objectives listed or properly referenced in the plan.

Final disposal locations should also be identified.

ECCC Recommendation(s)

ECCC recommends the plan include treatment objectives for remediated soils and identify where soils will be used when removed.

4. Disposal of Water from within the Berm

Reference(s)

- Amendment to Rankin Inlet Landfarm, Supplement Information Guideline, Operation and Maintenance Plan – Existing Licence # 1BR-RAN2131 Dated March 7, 2022; Section 1.5 Annual Water/Soil Quality Remediation Objectives
- Amendment Application Section 15

Comment

The Operation and Maintenance Plan states that water from within the berm will be retained and sprayed over the contaminated soils to keep them wet. The main application document contradicts this, stating that the contaminated water disposal method is “Treated & dump out”.

If there is discharge of the treated water from within the berm, discharge quality standards should be identified and information provided on the receiving area.

ECCC Recommendation(s)

ECCC recommends the plan include discharge standards for any liquids to be discharged, including a description of testing and the receiving environment.

If you need more information, please contact Victoria Shore at Victoria.Shore@ec.gc.ca.

Sincerely,

[original signed by]

Victoria Shore
Senior Environmental Assessment Officer

cc: Jody Small, Acting Head, Environmental Assessment North (NT and NU)