Water Resources Division Resource Management Directorate Nunavut Regional Office P.O. Box 100 Igaluit, NU, X0A 0H0

> Your file - Votre référence 1BR-COR2325 Our file - Notre référence GC Docs #:116801281

August 31, 2023

Richard Dwyer Manager of Licensing **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU, X0B 1J0 E-mail: Licencing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) Review of the Soil Treatment Plan for the Coral Harbour Remediation Project, Water Licence no. 1BR-COR2325

Dear Mr. Dwyer,

Thank you for your August 18, 2023 invitation to review the plan for the Coral Harbour Remediation Project, Water Licence no. 1BR-COR2325 issued to Crown-Indigenous Relations & Northern Affairs Canada- Contaminated Sites Program (licensee).

CIRNAC examined the plan pursuant to its mandated responsibilities under the *Nunavut* Waters and Nunavut Surface Rights Tribunal Act and the Department of Crown-Indigenous Relations and Northern Affairs Act. Please find CIRNAC's comments and recommendations in the attached Technical Review Memorandum.

If there are any questions or concerns, please contact me at (867) 975-4282 or Christine.Wilson3@rcaanc-cirnac.gc.ca

Regards,

Charte Wilson

Christine Wilson, Industrial Coordinator



Technical Review Memorandum

Date: August 31, 2023

To: Richard Dwyer – Manager of Licensing, Nunavut Water Board

From: Christine Wilson – Industrial Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC)

Review of the Soil Treatment Plan for the Coral Harbour Remediation

Project, Water Licence no. 1BR-COR2325

A. BACKGROUND

The Coral Harbour Remediation Project is located approximately 10 km northwest of the Hamlet of Coral Harbour within the Kivalliq Region of Nunavut. On June 15, 2023 the project was issued water licence no. 1BR-COR2325 to allow for camp operations, water use and deposit of waste while conducting remedial activities at the former military/army base.

The licensee submitted to the Nunavut Water Board (the Board) for approval a document titled "Type B Soil Treatment Plan" as required by Part E item 1 of the water licence.

CIRNAC provided the following comments and recommendations pertaining to the plan. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of the submissions can be found in Table 2 of Section B. Detailed technical review comments and requests for clarification can be found in Section C.



Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Reporting Spills- Contact for Inspector
R-02	Changes to Operation Plans
R-03	Additional Monitoring
R-04	Completeness of Plan



B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and referenced during the review.

Document Title	Author, File No., Rev., Date
1BR-COR2325 Water Licence	Nunavut Water Board, June 15, 2023
230817 1BR-COR2325 Type B Soil treatment	Milestone Environmental Contracting
Plan Final PSPC Signed-IMLE	Inc. August 8, 2023
230817 1BR-COR2325 Access Road	Milestone Environmental Contracting
Management Plan - FINAL-IMLE	Inc. July 21, 2023

1. Reporting Spills- Contact for Inspector

Part H, item 4 of the water licence states;

"If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:

- a. Employ the approved Spill Contingency Plan;
- b. Report the spill immediately to the NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4284; and
- c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site"

Recommendation: (R-01) CIRNAC recommends that the Licensee include contact for the Inspector as CIRNAC's Water Resource Officer Kyle Amsel at Kyle.Amsel@rcaanc-cirnac.gc.ca, telephone number (867) 645-2089 or the CIRNAC On-call Inspector telephone number (867) 975-4284.

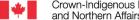
2. Changes to Operational Plans

Section 4.4 of the Type B Soil Treatment Plan includes a proposed timetable for the treatment of the contaminated soils in the land farm as follows:

"The planned treatment of the 1,448-m3 of Type B soils is expected to take 12-months depending on the actual contamination levels requiring treatment. This includes the excavation, transport, handling, treatment and final placement of soils."

Comment: If the Licensee anticipates changes to the proposed timetable the Board should be notify 30 days prior to those changes in accordance with Part item 4.

Recommendation: (R-02) CIRNAC recommends that the Licensee review the conditions found under Part B of the water licence, specifically related to implementation and changes to operating plans to ensure compliance with this part. CIRNAC



3. Notice

Part D, item 12 of the water licence states:

12. Surface contact water and seepage collected from the perimeter of the Landfarm Facility shall not exceed the following Effluent discharge criteria at Monitoring Station COR-5 prior to being released into the receiving environment:

Parameter	Maximum Concentration of any Grab Sample (mg/L)
рН	6 to 9 (pH units)
Oil and Grease	no visible sheen
Total Lead	0.001
Benzene	0.370
Toluene	0.002
Ethylbenzene	0.090

Part D, item 14 of the water licence states:

14. All Contact water, including demolition rinse water, associated with the storage and cleaning of contaminated areas and equipment at Monitoring Program Station COR-3 shall not exceed the following Effluent discharge criteria prior to releasing into the

receiving environment:

Parameter	Maximum Allowable Concentration
	(µg/L)
pΗ	6 to 9 (pH units)
Total Suspended Solids (mg/L)	50
Arsenic (total)	100
Cadmium (dissolved)	10
Chromium (dissolved)	100
Cobalt (dissolved)	50
Copper (dissolved)	200
Lead (dissolved)	50
Mercury (total)	0.6
Nickel (dissolved)	200
PCB (total)	1000
Zinc (total)	500
Benzene (μg/L)	370
Toluene (μg/L)	2
Ethylbenzene (μg/L)	90



Oil & Grease (mg/L)	15 and no visible sheen

Recommendation: (R-03) CIRNAC recommends that the Board require the Licensee to provide notice to the Inspector, 10 days prior to discharge at the Final Discharge Points described in Part D item 12 and 14. This recommended condition would align with other water licences regarding discharge of effluent from a compliance point to the environment. The 10 days notice allows the Inspector the opportunity to attend the site, record the location for future inspections and verify compliance with the condition of the licence.

4. Completeness of Plan

Part E, item 1 of the water licence states:

"The Licensee shall, at least sixty (60) days prior construction of Landfarm, submit to the Board for review a standalone Operation and Maintenance Plan for the landfarm including location map, expected volume of contaminated soils accepted/treated and soils removed, list of people with their contact information, safety procedures, frequency of maintenance activities and any other information that may help in the effective operation of the I andfarm "

Recommendation: (R-04) CIRNAC recommends that the Licensee amend the plan to include a brief section on maintenance, snow management and winter/spring freshet operations of the facility. CIRNAC understands that the facility will be operating for a short period of time; ensuring the integrity of the facility will limit further impacts to the environment.