

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

ECCC File: 6600 000 044/001  
NWB File: 1BR-BER



July 14, 2025

via email at: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

Robert Hunter  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0

Dear Robert Hunter:

**RE: 1BR-BER – CIRNAC – Bernard Harbour Pin C DEW Line Contaminated Sites  
Remediation – Type B Water License Application Reviewed**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) by CIRNAC regarding the above-mentioned Type B Water License Application.

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 – Retention Pond Water Quality Monitoring and Decommissioning**

Reference(s)

- Type B PHC Contaminated Soil Treatment Facility Plan
  - 9 Decommissioning of the CSTF (PDF Pg 13).

Comment

When addressing the management of the retention pond, the report states that “*any remaining water in the retention pond will be sampled for Petroleum Hydrocarbons (PHCs)*”



*and will be treated if necessary. Treated and/or clean water will be discharged at a location approved by the PSPC Construction Representative (PCR)."* However, the report lacks specific details regarding the discharge criteria that will be applied at the site. It remains unclear what parameters or thresholds must be met before water can be discharged, and whether these criteria align with provincial or federal environmental standards.

Additionally, the report does not provide information on the frequency or methodology of water sampling within the retention pond. It is not specified whether routine monitoring will be conducted, how often samples will be collected, or what contaminants will be tested beyond PHCs.

Given that the site is historically contaminated, it is reasonable to expect the presence of heavy metals such as lead in the soil. Despite this, the report does not address whether metals will be monitored within the soil or the retention pond water.

#### ECCC Recommendation(s)

ECCC recommends that the report be revised to include the following clarifications and additional information regarding the management of the retention pond and potential soil contamination:

- More detailed information on the specific discharge criteria that will be applied to water from the retention pond. This includes identifying the regulatory standards or guidelines that will be used to determine whether the water is suitable for discharge, and the parameters that will be tested (e.g., PHCs, metals, etc.);
- Clarify whether the retention pond will be subject to regular water quality sampling. If so, it should specify how often samples will be collected, what analytical methods will be used, and which contaminants will be monitored;
- A rationale should be provided to address the potential presence of metals—such as lead and other heavy metals—within the treated PHC-impacted soils. Given the historical nature of the site, it is important to assess whether these metals could leach into the retention pond or surrounding environment, and whether additional treatment or monitoring measures are necessary.

## **2. Topic – Retention Pond Decommissioning**

#### Reference(s)

- Type B PHC Contaminated Soil Treatment Facility Plan
  - 9 Decommissioning of the CSTF (PDF Pg 13).

#### Comment

When discussing the management of the retention pond, the report states that *"treated and/or clean water will be discharged at a location approved by the PCR."* However, the report does not provide specific details regarding the location of this approved discharge point or the method by which the water will be discharged. Furthermore, there is no

accompanying figure or map in the appendix to illustrate where this approved location is situated on the site. This lack of visual and descriptive information makes it difficult to assess the potential environmental impact of the discharge.

ECCC Recommendation(s)

ECCC recommends that the report include a comprehensive description of the discharge location. This should specify whether the site is near an aquatic receiving environment—such as a river, lake, stream, or wetland—and, if so, indicate the distance to the nearest water body. This information is essential for assessing the potential environmental impact of the discharge.

If you need more information, please contact Kelvin Mok at 647-951-8836 or [Kelvin.Mok@ec.gc.ca](mailto:Kelvin.Mok@ec.gc.ca).

Sincerely,

Kelvin Mok  
Environmental Assessment Officer

cc: Eva Walker, Head, Environmental Assessment North (NT and NU)  
Cristina Ruii, Manager of Environmental Assessment and Expert Support, Prairies and Northern Region