

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

> Your file - Votre référence 1BR-RFL1520 Our file - Notre référence CIDM# 1284410

March 25, 2020

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

Re: Crown-Indigenous Relations and Northern Affairs Canada's comments on 1BR-RFL1520 Transport Canada Water Licence Renewal Application

Dear Mr. Dwyer,

Thank you for your February 20, 2020 email invitation to review and comment on the above-referenced water licence renewal application.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) reviewed the submitted application documents, 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, and would like to provide the following comments to the Nunavut Water Board for consideration.

In the summary document, the licensee has requested that "the renewed licence suspends annual groundwater sampling during this LTF (i.e., landfarm facility) maintenance phase, until a suitable risk management or remediation option for all contaminants of concern can be applied." as "site conditions are such that sufficient groundwater samples to complete the required analysis have rarely been available,"

CIRNAC notes the logistic difficulty in obtaining sufficient volume of groundwater for the required analysis in a permafrost region. The primary objective of groundwater monitoring is to assess the mobility and extends of all the potential Contaminant of Concern (COC) below the surface of the site. Should the annual groundwater sampling be suspended during the maintenance phase, CIRNAC recommends that the licensee



design and implement other effective measures to assess or monitor the mobility of all the potential COCs underground.

The licensee has also stated in the summary document that a preliminary quantitative health and ecological risk assessment was commissioned in 2018 to help support management decisions for the site and that "(Based on the results of the problem formulation, the report concluded that there were no human or ecological exposure pathways that required further assessment and that potential unacceptable risks are not anticipated for human or ecological receptors at the site."

CIRNAC notes that per- and poly-fluoroalkyl substances (PFAS), identified as a potential Contaminant of Concern (COC) at the site in 2015, were not included in the scope of the preliminary quantitative human health and ecological risk assessment report and would recommend that the licensee clarify if and/or how the potential risks of PFAS for human or ecological receptors have been assessed.

CIRNAC also notes that different water licences (i.e., 1BR-LF1520, 1BR-RLF1520) have been referred to in the various documents included the renewal application package and recommends that the appropriate licence number be referenced consistently.

CIRNAC appreciates the opportunity to participate in this review. If there is any question, please contact me at (867) 975-4555 or <a href="mailto:david.zhong@canada.ca">david.zhong@canada.ca</a> or Mr. Godwin Okonkwo, Manager of Water Resources, at (867) 975-4550 or <a href="mailto:godwin.okonkwo@canada.ca">godwin.okonkwo@canada.ca</a>.

Sincerely,

David Zhong Regulatory and Science Advisor

