

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

> Your file - Votre référence 2AM-MEL1631 Our file - Notre référence CIDM#1289348

September 17, 2020

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

Re: Crown-Indigenous Relations and Northern Affairs Canada Comments on 2AM-MEL1631 Design Report Building for Water Treatment Complex.

Dear Mr. Dwyer,

Thank you for your August 27, 2020 email invitation to review and comment on the abovenoted design report.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) reviewed the design report, 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.

- Incomplete drawings and design criteria make it challenging for effective review and evaluation of the performance planned for the new Water Treatment Complex (WTC). CIRNAC notes that the design criteria pertaining to structural, civil, mechanical and geotechnical criteria were not provided for review. CIRNAC recommends that the rational section of the design report be expanded to reflect further the requirements of the above-indicated design criteria.
- 2. The use of heavy machinery for construction purpose could have an impact on the existing ground conditions, and facilitate permafrost degradation. There is no clear explanation in the design report on how the Licensee will anticipate and manage any unforeseen damages to the existing ground conditions. CIRNAC recommends that the construction methods and equipment be applied in a manner that considers avoidance or mitigation of permafrost degradation.



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

Sincerely,

David Zhong Regulatory and Science Advisor

