Water Resources Division Nunavut Regional Office Igaluit, NU XOA 0H0

July 10, 2019

Richard Dwyer Manager of Licensing, NWB P.O. Box 119 Gioa Haven, NU X0B 1J0

Re: 1AR-NAN1419 – Crown-Indigenous Relation and Northern Affairs Canada (CIRNAC) Completeness and Information Requests Review for Water <u>License Renewal/Amendment License Process - Nanisivik Mine Property – </u>

Canzinco Ltd. - Nyrstar Canada (Holdings) Ltd. (Nyrstar) - Nyrstar.

NWB File: 1AR-NAN1419

CIDMS #: 1256544

Dear Mr. Dwyer,

Thank you for your email on June 10, 2019, concerning the above mentioned water licence renewal/amendment application.

Crown-Indigenous and Northern Affairs Canada (CIRNAC) has conducted a review of the completeness and information requests and a memorandum is provided for the Nunavut Water Board (NWB) consideration. CIRNAC Comments have been provided pursuant to the Department's mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Indian Affairs and Northern Development Act.

Please do not hesitate to contact me by telephone at 867-222-9278 or email at ian.parsons@canada.ca for further comments or any questions.

Sincerely,

Original signed by

Ian Parsons Regional Coordinator

Completeness/Information Requests Review Memorandum

Re: 1AR-NAN1419 - CIRNAC's Completeness Review and Information
Requests for Water License Renewal/Amendment License Process Nanisivik Mine Property - Canzinco Ltd. - Nyrstar Canada (Holdings) Ltd.
(Nyrstar) - Nyrstar.

A. Background

The Nanisivik Mine Property is a past-producing zinc mine located in Canada's High Arctic approximated 30 km East of Arctic Bay, Nunavut. The mine operated for a period of 26 years from 1976 until 2002.

Since closure, Canzinco Ltd., a wholly owned subsidiary of Breakwater Resources Ltd. has implemented its closure and reclamation plan (approved 2004), including water quality and geotechnical monitoring for the Nanisivik Mine Site.

As of August 26, 2011, Breakwater Resources Ltd. was purchased by Nyrstar Canada (Holdings) Ltd., a wholly-owned subsidiary of Nyrstar NV., thus reclamation activities are still being carried out by Canzinco Ltd. however Canzinco Ltd. is now a wholly owned subsidiary of Nyrstar Canada (Holdings) Ltd.

During the last five years the licensee has continued to carry out its water licence monitoring requirements and has remediated the remaining contaminated soil from past mining operations.

The existing water license (1AR-NAN1419) is valid until December 31, 2019.

B. Results of Review

Following the review of the renewal/amendment water license application CIRNAC has the following completeness/information request:

Comment

As part of the 2016 Annual Geotechnical Inspection conducted by BGC Engineering Inc. (2017), it was reported that remediation of the hydrocarbon-impacted soils from beneath the Main Tank farm had been completed under the direction of the mine's geoenvironmental consultant, SRK. As such, control of the site was subsequently transferred to the Department of National Defense (DND), who commenced construction of a new tank farm facility in the footprint of the former mine tank farm.

Given that the former Nanisivik main tank farm area is now in possession of DND, no further inspections of this area have been undertaken by Canzinco Mines Ltd. or its consultants. It is unclear how the hydrocarbon-contaminated soils were successfully remediated to the applicable environmental quality standards, and whether the treated soils were "reused or disposed of appropriately" (per SRK 2014). CIRNAC was unable to locate appropriate documentation to confirm that the treated soils met the established Tier 3 Soil Quality Remediation Objectives treatment objectives, and indicate how the final handling of the soil was conducted (e.g., were they reused or disposed).

CIRNAC Recommendation

CIRNAC requests that;

- 1. Canzinco provide documentation to confirm that the treated soils met the established Tier 3 Soil Quality Remediation Objectives treatment objectives.
- 2. CIRNAC also requests details on the final handling of the soil to confirm if and how the soils were reused or disposed.

Conclusion

The application for water licence 1AR-NAN1419 renewal/amendment is complete upon clarification of CIRNAC's request. CIRNAC appreciates the opportunity to participate in this completeness/information request stage, and will be look forward to further reviews during the technical review stage.