October 29, 2021

Nunavut Water Board
Mohammad Ali Shaikh, Technical Advisor
P. O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Mr. Shaikh,

Re: Water Licence 1AR-NAN2030: Response to NWB Technical Review of 2020 Annual Report

The NWB completed a technical review of the contents of the 2020 Annual Report filed by Canzinco Mines Ltd. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Environment and Climate Change Canada (ECCC) were invited to review the report but only CIRNAC provided review comments. The results of the review were documented in a letter from the NWB dated 10 August 2021.

The technical review concluded that the 2020 Annual Report addressed the requirements of the Licence. Nevertheless, Canzinco was advised to respond to the review comments provided by CIRNAC.

Table 1 summarizes the comments and questions from CIRNAC and details Canzinco's responses.

We trust that our responses meet your expectations but would be pleased to respond to any additional questions or comments that you may have.

Sincerely,

Zied Tebaibi
Site Manager Nyrstar Langlois

Table 1 1AR-NAN2030: Response to CIRNAC Technical Review Comments on 2020 Annual Report

Topic	CIRNAC Comment/Question	CIRNAC Recommendation	Canzinco Response
Investigation of elevated sulphate concentration sources	Concentrations of sulphate at Station NML-29 in 2019 and 2020 were consistently above Action Level values defined in the Contingency Plan for Surface Water Quality Exceedances.	CIRNAC recommends that the proponent conduct a secondary investigation with chemical analysis testing recommended in the Appendix B 2020 Nyrstar Water Quality Monitoring report done for the proponent, and that the investigation include stations along the drainage channel as far west as NML-30 to confirm the hypothesis that the landfill is not part of the source of high sulphate concentrations.	Secondary surface water investigations at station NML-29 were completed as part of the site inspection undertaken in August 2021. In addition to the measurement of field parameters, four water quality samples were taken in the area and sent for laboratory analysis. A drone survey was also completed to assess potential surface water contributions from the landfill to station NML-29. The results of the investigations are under evaluation and will be discussed in the 2021 Annual Report.
pH Quality Assurance and Quality Control Results	Only three of the eight pH measurements meet the data quality objectives and field measurements are consistently higher than laboratory results (7 of 8 samples). Both sections 4.1.1 and 4.1.5 on QA/QC conclude samples results are representative, even though there seems to be systematic error resulting in measurements above data quality objectives.	CIRNAC recommends that the licensee carefully calibrate equipment used to measure pH in the future, and look for ways to reach data quality objectives if exceedances persist.	Several measures have been taken to ensure accurate pH field readings. In preparation for the 2021 site inspection, the pH probe used for the field measurements was sent for routine maintenance and calibration at a third party laboratory. While in the field, the probe was calibrated daily as per standard procedure. In addition, the field measurement procedures were reviewed to ensure their correct design and application.
Station Markers	Section 3.1 of Appendix B the 2020 Nyrstar Water Quality Monitoring report states “Station markers are present at select but not all stations”. Station markers are a typical component of QA/QC to ensure that the same sites are being sampled during each campaign.	CIRNAC recommends that the licensee install markers at all water quality monitoring stations.	Station markers were installed as part of the 2021 site inspection. Following the 2021 site inspection, all water quality monitoring stations have station markers.
Removal of voluntary stations	CIRNA agrees with the removal of stations ELO and 159-6 Temp as concluded in the 2020 Water Quality Monitoring Report.	N/A	Stations ELO and 159-6 Temp were excluded from the 2021 water quality monitoring program.
Geotechnical Report	The geotechnical report was reviewed by CIRNA and was found to be satisfactory.	N/A	N/A