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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No. **1AR-NAN1419/B1/D11**

July 6, 2015

CanZinco Mines Ltd.
2900-550 Burrard Street
Vancouver, British Columbia, V6C 0A3

c/o Johan Skoglund
Group Manager Environment
Nyrstar Canada (Holdings) Ltd.
2840 – 650 West Georgia Street
P.O. Box 11552
Vancouver BC, V6B 4NB

Email: johan.skoglund@nyrstar.com.

Re: Licence No. 1AR-NAN1419 – Submission of 2014 Annual Report and Acceptance of Newly Proposed Site Specific Remediation Objectives

Dear Mr. Skoglund:

The Nunavut Water Board (the NWB or the Board) received from Nyrstar Canada (Holdings) Ltd. on behalf of CanZinco Mines Ltd. (the Licensee or the Proponent or CanZinco) several documents as part of the 2014 Annual Report submission that is intended to satisfy relevant requirements contained mostly in Schedule B of Type “A” Water Licence No. 1AR-NAN1419, issued for the former Nanisivik Mine Site. A list of the documents contained in the submission is included in *Annex A* of this correspondence.

Following receipt of the above-mentioned submission, the NWB distributed¹ the documents publicly on May 8, 2015 for information purposes with no specific deadline for comments. By the date of this letter, comments² related to two specific documents submitted with in the 2014 Annual Report were received from the Department of National Defence (DND) and Public Works and Government Services of Canada (PWGSC) as a combined submission. A separate submission was received from Aboriginal Affairs and Northern Development Canada (AANDC).

¹ Letter from P. Beaulieu, NWB to J. Skoglund, Nyrstar, Re: 1AR-NAN1419 Receipt of 2014 Annual Report.

² Email from J. Paradis, DND, to Licensing Department and S. Joseph, NWB, Re 1AR-NAN1419 - Comments of 2014 Annual Report, May 12, 2015 and Letter from C. Doupe, Environmental Services, PWGSC, to J. Paradis, DND, Re: Review of Hemmera's 2015 report, Soil Toxicity Testing and the Development of Site Specific Remediation Objectives for the Nanisivik Docksites, May 4, 2015; Email from J. Paradis, to S. Joseph, NWB, Cc'd J. Skoglund, Nyrstar, Re AR-NAN1419 Response to DND Review Comments on 2014 Annual Report, June 12, 2015; and Email from Ian Parson, AANDC, to S. Joseph, NWB, Re Submission for Licence 1AR-NAN1419, June 5, 2015.

The DND component of the combined submission included comments on several issues of concerns as they relate to the document entitled *Nanisivik Mine, Contaminated Soil Remediation 2014 Progress Report* (SRK Consulting, March 2015). In particular, the DND commented on several issues including laboratory certificates not incorporated into the report, absence of specific water quality sampling results, clarification required for areas to be excavated and excavation depth, the fate of contaminated soil off-loaded to the secondary containment area, confirmation to be provided that the biopiles meet the *Site Specific Soil Remediation Objectives* (SSROs) prior to offloading, clarification required for soil to be stored on the concrete pad, consistency in sampling-related information contained in figures and tables included in the report and more.

Public Works and Government Services of Canada (PWGSC) indicated in its component of the combined submission that based on its review of the document entitled *Soil Toxicity Testing and the Derivation of Site Specific Soil Remediation Objectives (SSROs) for the Nanisivik Docksite*, (Hemmera, March 6, 2015), it believes that the proposed assessment done for the soil containing Petroleum Hydrocarbon (PHC), Fraction 2 (F2) contamination is sound and the use of the Canadian Council of Ministers of the Environment's (CCME) Canada Wide Standards for Petroleum Hydrocarbons as a basis in developing site Specific Remediation Objectives (SSROs) is an appropriate use of the standards; notwithstanding the fact that three deficiencies were noted for the SSROs developed. The deficiencies surround homogeneity of the samples submitted for toxicity testing, F2 concentration to growth response in plants, and changes noted in F2 concentration during transportation.

AANDC in its correspondence related to the Licensee's submission indicated that it was not going to provide any comment as it thinks that everything is acceptable going forward. In response to the comments and issues raised by the DND, CanZinco submitted correspondence³ to the Board on May 27, 2015, which indicated that it was informed on April 15, 2015 that the DND is now the federal custodian for the land at the dock site; therefore, it will be providing bi-weekly reports directly to the DND in the future. In addition, CanZinco provided its response to the issues of concern raised in the DND-PWGSC combined submission.

The NWB reviewed the respective documents that are the subject of the DND-PWGSC combined submission, in the context of the Abandonment and Restoration Plans approved by the Board under previous Licence No. 1AR-NAN0914 and the term and condition under Part D, Item 11 in the easing Licence No. 1AR-NAN1419 while taking into consideration comments, concerns, and recommendations provided by the intervening parties. The Board is aware that newly proposed SSROs, <410 mg/kg, is considerably higher than 260 mg/kg, included in CCME Canada Wide Standards for F2 soil and originally proposed in the 2004 Abandonment and Reclamation Plan; however, the Board is of the understanding that the end use of soil meeting the proposed SSROs is deemed suitable for the DND⁴ and that such soil is unlikely to pose any significant direct risk to plants, soil invertebrates and proximal surface or freshwater water bodies⁵. On this basis, the Board concurs that the SSROs proposed are acceptable, as noted under Motion No. 2015-FB-001. However, if it is determined subsequently that the end use of soil meeting the proposed SSROs could directly or indirectly impact fresh water bodies, the

³ Letter from J. Skoglund, Nyrstar, to P. Beaulieu, NWB, Re: Water Licence 1AR-NAN1419: Response to Comments from Public Review of 2014 Annual Report, May 27, 2014

⁴ Email from J. Paradis to S. Joseph, Cc'd J. Skoglund, G. Mathews, Re: 1AR-NAN1419 Response to DND Review Comments on 2014 Annual Report, June 12, 2015.

⁵ Soil Toxicity Testing and the Derivation of Site Specific Soil Remediation Objectives (SSROs) for the Nanisivik Docksite, March 6, 2015.

Licensee should inform the Board prior to using such soil irrespective of the end use.

Should you have any questions or concerns related to the above, please contact the undersigned at your earliest convenience.

Sincerely,

Thomas Kabloona
Nunavut Water Board, Chair

Attachment ANNEX A

Cc Qikiqtani Distribution List

**ANNEX A: List of Documents Included under the 2014 Annual Report for
Licence No. 1AR-NAN1520:**

1. Appendix A: Inuktitut translation: Summary of this letter;
2. Appendix B: Former Nanisivik Mine Site Waste Management Plan. March 2015 Update;
3. Appendix C: 2014 Annual Water Quality Monitoring Report. Stantec. March 20, 2015;
4. Appendix D: Inuktitut translation: Executive Summary of 2014 Water Quality Monitoring Report;
5. Appendix E: Soil Toxicity Testing and the Derivation of Site Specific Soil Remediation Objectives (SSROs) for the Nanisivik docksite. Hemmera. March 6, 2015;
6. Appendix F: Inuktitut translation: Summary of Nanisivik Soil Ecotoxicity Assessment;
7. Appendix G: Former Nanisivik Mine Spill Contingency Plan. March 2015 update;
8. Appendix H: 2014 Annual Geotechnical Inspection Report. BGC Engineering. February 28, 2015;
9. Appendix I: Inuktitut translation: Executive summary of 2014 Geotechnical Inspection Report;
10. Appendix J: Quality Assurance / Quality Control Plan for Surface Water Monitoring Samples. Stantec. March 24, 2015;
11. Appendix K: Inuktitut translation: Executive summary of Quality Assurance / Quality Control Plan;
12. Appendix L: Post Closure Geotechnical Monitoring Contingency Plan. BGC Engineering. March 17, 2015;
13. Appendix M: Inuktitut translation: Executive summary of Post Closure Geotechnical Monitoring Contingency Plan;
14. Appendix N: Contingency Plan for Water Quality Exceedances. Stantec. March 24, 2015;
15. Appendix O: Inuktitut translation: Executive summary of Contingency Plan for Water Quality Exceedances;
16. Appendix P: Geotechnical Monitoring Instrument Installation Record and Contingency Plan. BGC Consulting. 17 March 2015;
17. Appendix Q: Inuktitut translation: Executive summary of Geotechnical Monitoring Instrument Installation Record and Contingency Plan;
18. Appendix R: Contaminated Soil Remediation 2014 Progress Report. SRK Consulting. March 2015;
19. Appendix S: Inuktitut translation: Executive summary of Contaminated Soil Remediation 2014 Progress Report; and
20. Appendix T: Update to Appendix B of the 2014 Abandonment and Reclamation Plan for Treatment of Contaminated Soil at the Former Nanisivik Mine. SRK Consulting. March 2015.