

Appendix A

Executive summary of Water Licence amendment application (English)

Appendix A: Executive Summary of 1AR-NAN0914 Water Licence Application Amendment

This document provides a summary of Canzinco's application for amendment of Water Licence 1AR-NAN0914 related to the former Nanisivik mine site.

Operations at the Nanisivik mine were terminated in 2002 and all mining areas and associated infrastructure were successfully closed and rehabilitated over the period 2002 to 2008. The existing Water Licence 1AR-NAN0914 issued in 2009 authorizes Canzinco Ltd. to conduct post-closure monitoring of reclaimed mining areas and to close and remediate a former fuel tank farm located at the Nanisivik dock site. The nature and overall scope of the undertakings included in Canzinco's application for an amended Water Licence are identical to those authorized through the existing Water Licence 1AR-NAN0914. The amendment application also does not propose any changes to the licensee, the location of the undertakings, or the type and quantity of water uses. The proposed Water Licence amendment does not affect water rights or licenses held by others.

While the purpose of the Water Licence remains the same, several changes to the conditions of the Water Licence are being proposed as part of the amendment application. In general, the changes seek to establish revised post-closure monitoring requirements that reflect the successful closure of the mine and to improve the efficiency of the soil remediation activities conducted at the dock site. Key amendments proposed by Canzinco are summarised below and described in more detail in the application documentation.

- Geotechnical monitoring data collected under the existing Water Licence has demonstrated that completed surface reclamation covers and other geotechnical installations are performing well and in accordance with their design intent. On the basis of the successful results achieved to date, Canzinco proposes that the geotechnical monitoring program specified in Part I of the Water Licence be modified and reduced to better reflect the monitoring needs applicable at this stage of post-closure.
- Similar to the geotechnical monitoring, the results of the water quality monitoring program have demonstrated stable conditions and confirmed that implemented closure and rehabilitation measures perform as expected. Monitoring results in the 159-4 compliance station, at the outflow from the former tailing storage facility, have remained significantly below the discharge limits established in the existing Water Licence. Based on the positive monitoring results to date, it is proposed the water quality monitoring program specified in Part I of the Water Licence be modified and reduced to better reflect the monitoring needs applicable at this stage of post-closure.
- Reclamation of the former fuel tank farm has been undertaken as per the requirements specified in the Water Licence and the methodology established in the Abandonment and Reclamation Plan for this work. While these activities have progressed well, increases in the estimated quantities of contaminated soil and lower than expected soil treatment rates have necessitated extensions to the time schedule for the remediation works. Applying the soil treatment approach approved through the existing Water Licence, it is estimated the soil remediation will be completed by the end of the 2016 field season. In order to improve the efficiency of the soil remediation and to address potential land use conflicts associated with the Department of National Defence's planned use of the dock site, an alternative remediation approach has been developed by Canzinco and is included as part of the Licence amendment application. In brief, this alternative approach involves the transfer of the contaminated soil to an ecologically non-sensitive area (at the dock site), elimination of exposure pathways by capping the

materials with clean soil and, simultaneously to these risk management activities, the pursuit of studies to demonstrate that the residual low levels of soil contamination do not pose risks to human health or the environment. In line with this modification, Canzinc proposes an amendment to Part J.2 of the Water Licence requiring the development and approval (by the Water Board) of a new Abandonment and Reclamation Plan for the contaminated soil at the dock site.

A number of stakeholder consultation activities have been conducted by Canzinc as part of the preparation of the Water Licence amendment application. The purpose of these activities has been to present the scope and results of the reclamation and monitoring work completed at Nanisivik since 2009 and to seek feedback on the Licence amendments being sought by Canzinc. Key stakeholders engaged as part of the consultation activities include the Aboriginal Affairs and Northern Development Canada, the Government of Nunavut, the Hamlet of Arctic Bay, the Arctic Bay Hunters and Trappers Organisation, the Department of Fisheries and Oceans, and the Department of National Defence. The comments and feedback received through the stakeholder consultations have been incorporated and addressed in the Water Licence amendment application. Given the consultation activities already undertaken by Canzinc and that these engagements did not identify any significant stakeholder concerns, Canzinc requests that any public hearings being required by the Water Board as part of the Licence application process be conducted in writing.

Canzinc proposes that the amended Water Licence be issued for a term of five years. The existing Water Licence expires on March 31, 2014.