



Aboriginal Affairs and
Northern Development Canada

Affaires autochtones et
Développement du Nord Canada

Executive Summary

Water Licence Renewal Application
Public Hearing

Water Licence #1AR-NAN0914
Nanisivik Mine Site
Canzinc Mines Ltd.
Nyrstar Canada (Holdings) Ltd.
Qikiqtani Region, Nunavut

October 8, 2014



Canada 

Aboriginal Affairs and Northern Development Canada (the Department) is an interested party in the Nunavut Water Board review of the Canzinc Type 'A' water licence renewal application for the Nanisivik mine site property. Pursuant to federal legislation, the Department has shared responsibility with the Nunavut Water Board to protect the freshwater resources of Nunavut. The renewal is a result of the current water licence expiring on March 31, 2014.

The Department has a few concerns with respect to the renewal application. These concerns revolve primarily around the remediation of the remaining contaminated soil.

In order to properly address these concerns, the Department has outlined specific recommendations that should reduce or eliminate potential impacts on water quality. Listed below are AANDC's six recommendations:

- 1) The Department recommends the Licensee clarify what the end use of the remediated soil will be and where the remediated soil will be placed both in the short term and in the long-term.
- 2) The Department recommends that the licensee provide an updated financial security assessment for the entire mine site including, but not limited to, changes in soil reclamation strategies.

The next four recommendations deal specifically with the Licensee's proposed Methodology and Approach for the development of Site Specific Soil Remediation Objectives (SSRO's)

- 3) The Department recommends that the Licensee describe the soil types, which were tested, both physically and chemically as well as providing rationale as to why sweet crude oil is an acceptable indicator for the gasoline/diesel contaminants.
- 4) The Department recommends that the Licensee describe and explain what type of ex-situ bioremediation is being applied. The effectiveness of the technology in regards to the environmental conditions should also be incorporated.
- 5) The Department recommends that the Licensee submit the most recent analytical results to the NWB for additional review, as these results are the basis for the proposed approach.
- 6) The Department recommends that the approach being implemented by the Licensee should be more robust, in that, the approach should not solely rely on plant growth but also include insect response. In addition, AANDC requests that the proponent consider the possibility of bioaccumulation in biota relying on such plants.

The department has described these concerns with recommendations in more detail in its technical review memorandum to the Nunavut Water Board.

The Department will be participating in the upcoming Public Hearing that will be held in Arctic Bay in-person on October 8, 2014.