

18 JUNE 2014



# Nanisivik Water Licence Amendment/Renewal Technical Meeting and Pre-Hearing Conference





## Post-closure Water Quality Monitoring

## Water Quality Monitoring

- 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, the following modifications to the existing monitoring schedule are proposed:
  - Discontinuation of analytical test group NAN-2 (petroleum hydrocarbons and/or oil and grease) at all monitoring locations. Observations of sheen on the water surface will be maintained and analysis for NAN-2 completed if a sheen is observed.
  - Trace element scans (test group NAN-4) will be discontinued (although analysis for total cadmium, lead and zinc will continue).
  - Reduction of regulated parameters to total cadmium, total lead, total zinc, total suspended solids, and pH.
  - Removal of monitoring stations 159-10, 159-15 and 159-17.
  - Reduction in monitoring frequency from bi-weekly to monthly.





## Post-closure Geotechnical Monitoring

## Geotechnical Monitoring

- The geotechnical monitoring program has demonstrated that completed surface reclamation covers and other geotechnical installations are performing in accordance with their design intents.
- In particular, geothermal monitoring data indicates that installed thermal covers achieve their design objectives by confining the active thaw layer within the covers and maintaining the underlying waste materials in a frozen state.
- Given the successful results to date, the following minor modifications to the existing monitoring schedule are proposed:
  - Data collection will be limited to the period July 1<sup>st</sup> to September 1<sup>st</sup>.
  - Thermocouples will no longer be monitored.
  - Groundwater monitoring in the Surface Cell and Test Cell taliks will be discontinued.



## Remediation of Contaminated Soil

## Soil Remediation Licence Application

- The licence amendment/renewal application seeks to maintain the existing approach to the remediation of petroleum contaminated soil. This soil treatment approach has already been approved by the NWB and has proven to be effective.
  - For reasons outlined in Canzinc's submission to the NWB dated 13 April 2014, the previously sought amendment to the remediation strategy was found not to be feasible and has been abandoned.
- Site specific CCME soil quality remediation objectives (SQROs) will be pursued during 2014. Based on the NWB's Notice dated 2 May 2014, we understand the development of site specific SQROs does not constitute a licence amendment.
- An updated Abandonment and Reclamation (A&R) Plan will be prepared and submitted to the NWB for approval. In order to incorporate the new SQROs and any licensing requirements from the NWB, it is proposed the updated A&R Plan be filed following the completion of the licensing process (as was the case for the existing A&R Plan).

## Soil Remediation

### Potential Land Use Conflicts

- It is recognised the soil remediation works represent a potential conflict with the DND's future construction of a naval facility. CanZinco has gone to great lengths, and continue to make all reasonable efforts, to resolve these potential conflicts.
- While important and demanding CanZinco's attention and involvement, we do not believe the water licensing process is the appropriate forum for resolving the conflicts. The following considerations support this conclusion:
  - CanZinco, the DFO and the DND are working collaboratively to resolve the conflicts. A soil movement plan allowing the construction areas to be evacuated by the end of the 2014 field season has been prepared by CanZinco and is undergoing review by the DFO and DND. The planned soil movements conform to the requirements of the existing water licence.
  - DFO holds the underlying tenure to these lands and therefore is dealing directly with DND regarding future use. CanZinco, although engaged in finding a solution, does not have a direct or formal relationship with the DND and as such the potential land use conflicts are principally an issue between the DFO and the DND.
  - We understand the water licensing process as relating to the approval of water use or deposit of waste; this does not necessarily encompass resolution of land use conflicts.
  - The timelines of the licensing process likely do not allow the conflicts to be resolved in a timely manner. Adherence to the DND's construction schedule requires the land use conflicts to be resolved during the 2014 field season.