



# **Aboriginal Affairs and Northern Development Canada (AANDC) Community Hearing Presentation**

## **Canadian Zinc Corporation Prairie Creek Mine Project**

**MVEIRB EA0809-002**

**Nahanni Butte, NWT  
June 22, 2011**



NWT Region



# Technical Review Summary

Three main areas of concern:

1. Water Quality
2. Water Management and Storage
3. Tailings Management and Storage

# Technical Review Summary

Other concerns:

- Aquatic Effects Monitoring Program (AEMP) and Adaptive Management
- Post Closure
- Access Road

# Water Quality

- Operating water quality standards, including discharge, should be developed using the natural condition of Prairie Creek as a starting point.
- AANDC recommends that all parties should be involved in determining what the water quality standards for this project should be.
- This should be done before the completion of this EA.

# Water Management and Storage

- The current plan is to store water on site if it does not meet water quality standards for discharge into the environment.
- Water storage is limited at the site.
- AANDC recommends water storage should be carefully managed taking into account potential emergency situations.

# Tailings Management and Storage

- Based on AANDC's calculations, additional storage of tailings on surface during and after mine operations may be required.
- This will impact the current limited water storage capacity.
- Surface tailings storage post closure has not been assessed.
- AANDC recommends that CZN provide more information regarding tailings management and storage.

# AEMP and Adaptive Management

- CZN's proposed AEMP includes reference to AANDC's Guidelines for AEMPs, but is missing key components.
- AANDC recommends that CZN follow AANDC's Guidelines in the development of its AEMP and adaptive management for the Prairie Creek Mine.

# Post Closure

- CZN has provided minimal assessment of post closure impacts.
- AANDC recommends that CZN develop a Preliminary Closure and Reclamation Plan, during the regulatory phase prior to Water Licence issuance.
- The plan must be developed in consultation with regulators, stakeholders and other interested parties. The plan should developed in accordance with AANDC's Mine Site Reclamation Guidelines.



# Access Road

Further discussion and information is required regarding:

- Land Disturbance
- Permafrost Degradation
- Sediment Inputs
- Post Closure
- Spills

# Concluding Remarks

- The Prairie Creek Mine will discharge effluent into Prairie Creek.
- The effluent discharge location is 7 km upstream of the boundary with NNPR.
  - National Park
  - UNESCO World Heritage Site
  - Canadian Heritage River
- An aboriginal subsistence fishery exists at the mouth of Prairie Creek.
- The level of protection required for Prairie Creek must consider conditions within Prairie Creek as well as the downstream environment.

# Concluding Remarks

- As proposed, the Prairie Creek Mine development poses a high level of risk for significant adverse impacts to water.
- AANDC is committed to working with interested parties towards the resolution of outstanding issues identified during the process.



Indian and Northern  
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et du Nord Canada

# Thank you



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