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

Canadian Zinc Corporation
Prairie Creek Mine Project

MVEI RB EA0809-002

Nahanni Butte, NWT
June 22, 2011
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.
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.
Thank you