



# Nunavut Water Board Public Hearing

## **Lupin Mines Inc. Water Licence Renewal**

Presentation by the  
Kitikmeot Inuit Association

*October 22 - 23, 2014  
Kugluktuk, Nunavut*

# Presentation Outline



- KIA Staff Introductions
- KIA's Role in the Lupin Project
- KIA's Review of the Water Licence Renewal
  - KIA Concerns and Recommendations
  - LMI Responses and KIA Assessments
- Conclusions and Questions



## **Kitikmeot Inuit Association Staff**

**Mr. Geoffrey Clark, M.Sc., MBA**  
Director of Lands and Environment

**Mr. Luigi Torretti, M.Sc., B.Comm.**  
Senior Environment Officer

**Ms. Tannis Bolt**  
Lands & Environment Project Officer



# KIA's Role in the Lupin Project

- The Lupin project is entirely on Crown Land
  - AANDC administers all land tenure matters
- KIA holds no land tenure documents (licences or leases) for the Lupin Project
  - There are no activities, including exploration, on Inuit Owned Land
- KIA does not hold reclamation or any other security for the project



# KIA's Role in the Lupin Project

- KIA is the Regional Inuit Association (RIA) for the Kitikmeot and represents the Inuit beneficiaries of the NLCA
- KIA's Mandate:
  - *To represent the interests of Kitikmeot Inuit by protecting and promoting our social, cultural, political, environmental and economic well-being.*
- KIA promotes appropriate exploration and mining development in the interest of all Inuit
  - Projects must balance economic and social development
  - Projects must sustain the land, wildlife and Inuit lifestyles



# KIA's Role in the Lupin Project

- KIA is a consistent participant in Nunavut regulatory processes
  - Nunavut Water Board, Nunavut Impact Review Board & Nunavut Planning Commission
  - Some Inuit have expressed concerns about water quality & tailings at Lupin
- KIA is the Designated Inuit Organization for:
  - Wildlife Compensation (Article 6)
    - KIA has developed compensation procedures for destruction of terrestrial mammals

# KIA's Review of the Water Licence Renewal



- KIA has:
  - Considered Inuit concerns relating to Lupin water quality and tailings at Lupin
  - Participated in the process to address these concerns
  - Reviewed the Lupin documents on the public registry
  - Engaged Hutchinson Environmental Sciences Ltd. to assess these Inuit concerns
- KIA detailed its position on the Water Licence Renewal in our August 14, 2014 submission to the NWB

# KIA's Review of the Water Licence Renewal



- The KIA would like to highlight and provide recommendations related to the following four topics:
  1. Water Management – Inspection Frequency at the Tailings Containment Area
  2. Water Management – risk of uncontrolled releases
  3. Water & Sediment Chemistry in the Receiving Environment
  4. Continued Tailings Reclamation



# 1. Water Management – Inspection Frequency-Tailings Containment Area



- Concerns:
  - The level of inspection proposed may not be sufficient during the freshet (high inflow periods) to provide an adequate level of protection of receiving waters.
- Recommendation:
  - Inspection of the dams should be carried out on a weekly basis at least during freshet (approximately May and June) and more frequently if required by an inspector due to concerns observed at the site.

# 1. Water Management – Inspection Frequency-Tailings Containment Area



- LMI Response:
  - The frequency of monitoring is aligned with the recommendations made by the geotechnical engineer.
- KIA Assessment:
  - KIA concerns about inspection frequency during freshet has not been addressed.



## 2. Water Management – Risk of Uncontrolled Releases

- Concern:
  - Sewage Lakes and Fuel Containment Areas issues were identified in 2014, and these will likely be ongoing during C&M:
    - Water Balance may not be neutral;
    - Emergency Amendment granted in 2014.
  - Risk of uncontrolled releases.
  - How will contaminated water be managed?
- Recommendation:
  - Better management of excess water from freshet should be addressed to minimize the risks from uncontrolled releases to the environment.

## 2. Water Management – Risk of Uncontrolled Releases



- LMI Response:
  - The situation in 2014 occurred as a result of the water licence having expired and the subsequent restrictions imposed by the Inspector and regulators preventing LMI from being able to discharge water from these facilities. LMI does not agree that an expired licence should prevent activities to reduce environment risks.
- KIA Assessment:
  - KIA concerns about water management and water balance have not been fully addressed.

### 3. Water & Sediment Chemistry in the Receiving Environment



- Concern:
  - Although no measurable effects were detected on arctic grayling, data suggests that water and sediment chemistry in Seep Creek may need further assessment in order to gauge concerns for the receiving environment.
- Recommendation:
  - Further assessment of the water chemistry in Seep Creek;
  - Additional sampling focused on maximum concentrations during the low flow periods & assess if these concentrations affect the receiving environment;
  - A special sediment concentrations study should be considered;
  - Any need for additional biological monitoring could be assessed based on these results.

### 3. Water & Sediment Chemistry in the Receiving Environment



- LMI Response:
  - LMI will review the data and work with the various authorities to determine what studies are merited, the basis and potential benefits of such studies and the extent and timing of same.
- KIA Assessment:
  - The KIA is pleased to see this commitment by LMI. The KIA looks forward to LMI working with NWB and other regulators to further develop these studies and monitoring program(s).



## 4. Continued Tailings Reclamation

- Concern:
  - Prior to 2006, restorations activities (i.e., covering the tailings with esker material, as per the water licence) occurred regularly at LMI. Unfortunately, this was not continued in 2006 and beyond.
- Recommendation:
  - LMI should continue to cover the tailings with esker material as per the closure plan even during care and maintenance.



## 4. Continued Tailings Reclamation

- LMI Response:
  - Should the monitoring results show that windblown tails are currently being deposited outside of the facility (which is unlikely) as a result of the exposed saturated tails in Cell 3 additional measures will be implemented to control this source.
- KIA Assessment:
  - This KIA recommendation was not specific to windblown tails, but the LMI effort is appreciated.
  - If/when LMI recommences operations, how much volume would be needed in the TCA?





# Conclusions

- The KIA supports appropriate mining development in the Kitikmeot, including the Lupin Project
- The KIA has important responsibilities to Kitikmeot Inuit to:
  - Balance economic development with environmental protection
  - Protect the land, wildlife and Inuit lifestyles
- LMI has addressed some but not all of KIA's concerns

# Concluding Remarks



- The KIA hopes that our input has been helpful to LMI, the NWB, the public and to other interveners
- This concludes our presentation; we are now available for questions

The End

