Traditional Knowledge Use at EKATI Mine: Agency Perspective



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Outline of This Talk

- Environmental Agreement and Agency's History in Promoting use of TK at Ekati
- Uses of TK in Monitoring (Caribou and Fish)
- Other aspects of TK relevant to EKATI Mine
- TK informing Reclamation Planning
- Agency Position on TK at BHPB mine

Environmental Agreement

 Article XI (11.3)states: "BHPB shall incorporate all available traditional knowledge in the Plans and Programs and shall give all available traditional knowledge full consideration along with other scientific knowledge"

Environmental Agreement

 Agency role: "to compile and analyze available relevant Environmental Quality data, in order to review, report, or make recommendations concerning ... the integration of traditional knowledge and experience of the Aboriginal Peoples into Environmental Plans and Programs" (Article 4.2 [vi])

How has Agency promoted TK?

Since 1998, Agency has made
 19 recommendations involving TK and
 Aboriginal participation in environmental management

How has Agency promoted TK?

- 3 TK Workshops (2 hosted by Agency)
 - "The Use of TK in the Environmental Management of Ekati" (Dec. 1998): recommended continuing meetings to develop initiatives to incorporate TK into monitoring programs
 - "TK Monitoring Workshop" (Mar. 2003):
 recommended a Regional TK Panel to advise both
 Agency and EMAB on TK matters
 - "Community and TK Workshop" (Oct. 2010): failed to meet objective of determining how to incorporate TK into wildlife monitoring at the 3 diamond mines

Caribou and Roads Project



Objective: protect health of caribou migrating through mine site



- A good example of how TK can be used to improve wildlife protection
- Inokhok at the mine site to deter caribou during spring migration (needs monitoring during migration to establish effectiveness)

Fish Health

- D.E.L.T.: checking fish in lakes downstream of the mine for physical signs of illness
 - Deformities
 - Lesions/Tumors
 - Heavy parasite infestation
 - Abnormal internal organs
- TK fish specialists from
 - YK Dene FNLutsel K'e Dene FN
 - NSMA KIA
 fish sampling in August early September 2007, next time in 2012
- TK noted that populations generally healthy; many lake trout contained parasitic cysts

Cultural practices: relevant to BHPB's Mine?

- Alice Wifladt (N'dilo), Verna Crapeau (Dettah), and Celine Marlowe (Lutsel K'e) taught hide preparation and tanning to make traditional moccasins.
- *by <u>using without damaging</u>;... by <u>offering to pay the land</u>; and by learning to live with the land and its changes without bringing change."

Agency Advised Federal Government on TK

- Agency helped AANDC (formerly INAC)
 develop guidelines for developers to use
 TK in their monitoring plans
 - Aboriginal taxonomies: how do Aboriginal harvesters classify animals and fish?
 - based on <u>behavioural</u> or <u>morphological</u> differences
 - often different from biologists' classification

Aboriginal Taxonomy for Broad Whitefish

- Biologists recognize this fish as only 1 species
- ❖Gwich'in and other First Nations on Mackenzie River → - "lake" whitefish
 - "river" whitefish
 - DFO genetics research confirmed

TK Informing Reclamation Planning

- Communities participated in reclamation planning for mine components
- BHPB wants TK-based advice on
 - revegetation
 - wildlife access onto rock piles
 - pit lakes

Natasha Thorpe (2011 TK review for Diavik)

 It is not always clear how TK information influenced operations in northern industrial developments. There needs to be a link identified between an available piece of TK information that informed a project and a decision taken by the mine operator.

Agency Position on TK Use

- Use of TK in environmental management at mine could be better documented in BHPB's annual environmental report.
- How has TK from employees, community projects and elder site visits been used to improve <u>environmental</u> <u>management</u> and <u>reclamation planning</u>?
- Has any of this TK been used as BHPB changes and improves its monitoring programs?
- What <u>changes or improvements in adaptive</u> <u>management</u> can be attributed to TK?

<u>Agency Position on TK Use</u>

Unplanned Uses of TK

*Has BHPB used Aboriginal staff's TK, on "as needed" or emergency basis, to solve environmental problems as they arise or conflicts between mining operations and wildlife, fish, water or air quality?

Questions?