The Independent Environmental Watchdog

A Canadian Experiment in EIA Follow-up

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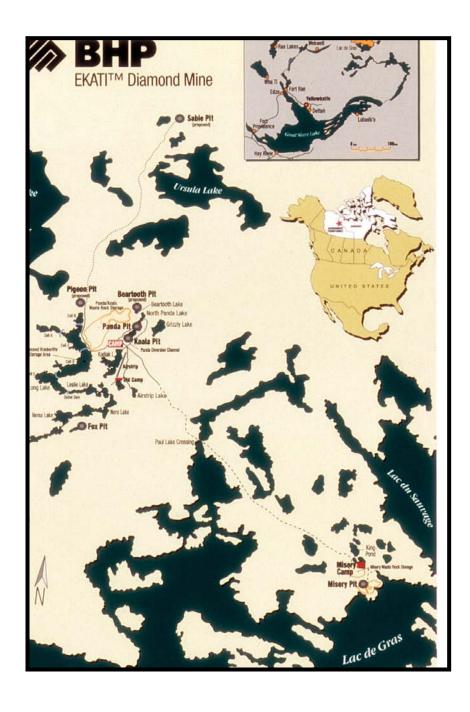
W&NC IAIA, Calgary November, 2002

The Independent Environmental Watchdog

- Ekati MineTM project description
- Monitoring requirements for Ekati mine
- Community involvement in follow up
 - Stories
 - Lessons
- Independent Environmental Monitoring Agency www.monitoringagency.net

Ekati Mine

- Diamond mine (Canada's first)
- Gem quality diamonds
- Northwest Territories
 - Arctic barrens, 300 km NE of Yellowknife
- Construction from 1996
- Operation from October, 1998
- Surface mining of kimberlite pipes (usually under lakes)
- Processing plant on site



Ekati Mine Location

Panda Pit Ekati



Photo
BHP
Diamonds

Ekati Mine Project Description

- Dewatering lakes for access to kimberlite pipes
- Explosives use (introduces nitrogen (ammonia) into waste rock)
- Waste rock sent to waste rock piles (AMD)
- Kimberlite is processed on site to extract the diamonds and then the residue (tailings) is disposed of into Long Lake tailings pond
- Work camp for several hundred staff ("hotel" accommodates 600 persons)

EIA Review for Ekati Mine

- Full panel review 1994-1996
- 1996 project approval
- Major affected people, aboriginal groups
 - Kitikmeot Inuit Association (Kugluktuk)
 - Dogrib Treaty 11 Council (Fort Rae)
 - Akaitcho Treaty 8 (Lutselke and Yellowknife)
 - North Slave Metis Alliance (Yellowknife)
- Approval subject to Environmental Agreement
 - BHP (proponent), GNWT, Canada

Monitoring Requirements for Ekati Mine

- Water Board water quality monitoring
- Fisheries authorisation fish studies
- Renewable Resources wildlife monitoring
- Operating Environmental Management Plan monitoring programs (spills, safety, etc.)
- Impact Benefit Agreements with aboriginal groups (bilateral) - socioeconomic aspects independent of Environmental Agreement

Community Monitoring for Ekati Mine

- Focus on
 - Wildlife caribou
 - Wildlife wolverine
 - Monitoring Agency liaison role

Caribou



Photo BHP Diamonds

- Caribou are the major VEC in the North
- Bathurst Caribou herd
 - 300 000 animals
 - Migrate through mine site (up to 70 000)
- Elders on site visits
- Community observations
- Annual monitoring workshops
- Caribou management board

- Site visits to observe and offer advice
 - Airport avoidance
 - Road design
 - Tailings pond concerns



Photo RWED

Government of the Northwest Territories

- Community observations
 - Caribou fitness
 - Caribou injuries

- Caribou monitoring program
 - Radio collars
 - Community objections

Tailings Pond







- Monitoring workshops
 - Aboriginal input
 - Government, industry, Agency input
 - Review monitoring results, adapt monitoring programs
 - Wildlife and aquatic effects (plus air quality and reclamation)
 - Annual events

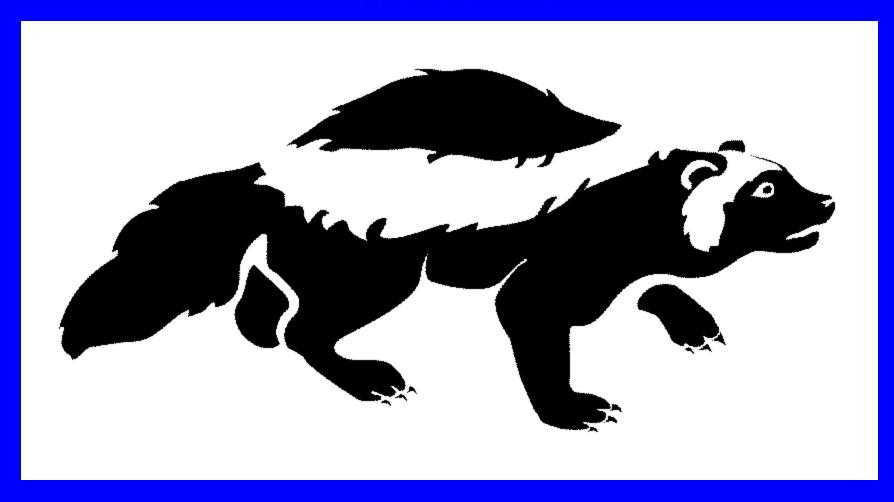
Elders visiting the poster display at the Workshop



Community Monitoring Archaeology



Community Monitoring Wolverine

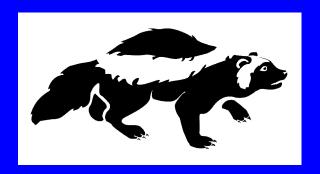


Community Monitoring Wolverine

- Significant adverse cumulative impact
 - Ekati, Diavik and Winter Road operation
 - Poor food handling results in about 15 animals killed or relocated over three years of a population of about 15-20 animals
 - Ekati and winter road food handling appears to be better now – not Diavik
- Regular monitoring via snow tracks

Community Monitoring Wolverine

- Need to identify wolverine tracks
 - Get best tracker in NWT Allen
 Niptanatiak, of Kugluktuk (300 km north of mine)
 - Known as best wolverine trapper in the area
 - Commutes by snowmobile to mine site





Community Monitoring Lessons

- Community role in influencing monitoring is considerable
 - Concern with dust on vegetation new monitoring program
 - Concern with tailings pond vegetation to avoid attracting caribou (use of TK)

Monitoring Lessons

- Community and technical monitoring a powerful tool
 - Community monitoring discussed
 - Much detailed technical and scientific monitoring also done
 - Combination has been effective in avoiding major impacts to date
 - Combination appears to be satisfactory to communities
 - Role for Independent Watchdog

- Public watchdog for environmental management at the Ekati mine
- Seven members: BHP, GNWT, Canada, and four aboriginal groups
- Seven board members appointed by seven members
- No "representation" all board members have the same common mandate
- Budget about Can\$500 000/a provided by Mine operator - initially some funds came from governments

In order to meet its mandate the Agency:

- monitors and reviews environmental management plans and reports by BHP and government agencies
- analyses issues to promote the identification, evaluation and management of environmental impacts
- reviews the activities of regulatory agencies and their interactions with BHP
- monitors the progress of traditional knowledge studies funded by BHP and conducted by aboriginal organisations
- facilitates interaction between BHP and aboriginal organisations to integrate traditional knowledge into BHP's management plan

- In order to meet its mandate the Agency:
 - participates in technical workshops involving environmental management at the Ekati mine
 - meets and corresponds regularly with with BHP and regulators about environmental issues at Ekati
 - reviews and comments on regulatory approvals sought by BHP that relate to environmental matters
 - reports to aboriginal organisations and the public at large
 - maintains a publicly accessible library of all materials regarding environmental management of the Ekati mine

- In order to meet its mandate the Agency:
 - publishes newsletters, a web site, a brochure and annual reports
 - holds an annual general meeting for members of the Monitoring Agency

Western & Northern Canada Affiliate International Association for Impact Assessment

- http://www.iaia-wnc.ca
- Memberships \$30/a forms available
- Holiday social
 - Monday, December 2
 - 17:00 to 19:00
 - Saltlick Steakhouse, lower level
 - 101 8th Ave SW