



## *Year in Review and Annual Report Summary 2003-2004*



# Independent Environmental Monitoring Agency

# Presentation Outline

- The Agency 2003-04 Annual Report and Recommendations
- Agency Highlights in 2003-2004
- Progress at Ekati
- Agency focus since April 2004
- Focus for the future
- Summary

# Agency Annual Report Summary, 2003-04

**“The Monitoring Agency shall report annually.....to BHP, the Minister, and the GNWT. All reports of the Monitoring Agency shall be made available to the Aboriginal Peoples and the general public.”**

Environmental Agreement  
BHP Billiton Diamond Project



Environmental workshop  
March 2004

# Wildlife Effects Monitoring Program

- Low numbers of caribou observed around the mine in 2003
- Wolves may be using mine infrastructure to corner caribou
- Further research is needed on dust monitoring and risk to animals that eat plants grown on processed kimberlite
- Wolverine monitoring could be improved
- Bird monitoring frequency could be reduced

# Wildlife Recommendations

## The Agency

### Recommends that;

- BHPB should consult with RWED in order to re-design the wolverine monitoring program based on hair samples and DNA-based identification of wolverine individuals.



Wolverine climbing scent station  
near Daring Lake, NTW – Rober  
Mulders, GNWT



# Wildlife Recommendations, cont.

## The Agency

### Recommends that;

- The monitoring of land breeding birds should be done every other year rather than every year.



White Fronted Geese at Ekati

# Wildlife Recommendations, cont.

## The Agency

### Recommends that;

- BHPB should undertake a new assessment of effects on wildlife from exposure to processed kimberlite based on the comments from RWED and IEMA.



Revegetation on processed kimberlite, LLCF 2003

# Aquatic Effects Monitoring Program

2003 was the sixth year of monitoring water quality since operations began. The Agency reviewed the AEMP report and suggested:

- Mining activities continue to change the water quality downstream of Ekati, however effects so far have not been serious
- BHPB should investigate the source of molybdenum that has been identified downstream of Ekati in low amounts



# Aquatics Environmental Monitoring Program

## Water Licence Renewal Process

The Agency submitted an intervention to the MVLWB. Highlights included comments on:

- The number of and limits for water quality parameters and to examine downstream dilution compared to CCME levels.
- The term of the licence; and
- Principles for clauses related to Abandonment and Reclamation.

# Abandonment and Reclamation

- Good revegetation research continues
- At this stage in the mine's life, we feel the closure plan needs to be better defined
- Submitted A&R Plan requires much work, was not approved by the MVLWB
- Closure objectives and criteria are required
- Little progressive reclamation occurred in 2003

# Abandonment and Reclamation Recommendation

## The Agency

### Recommends that;

- BHPB should produce a first draft of Ekati-specific closure criteria within one year. The next step should be for the company, government and other affected parties to meet in order to finalize closure criteria for Ekati.



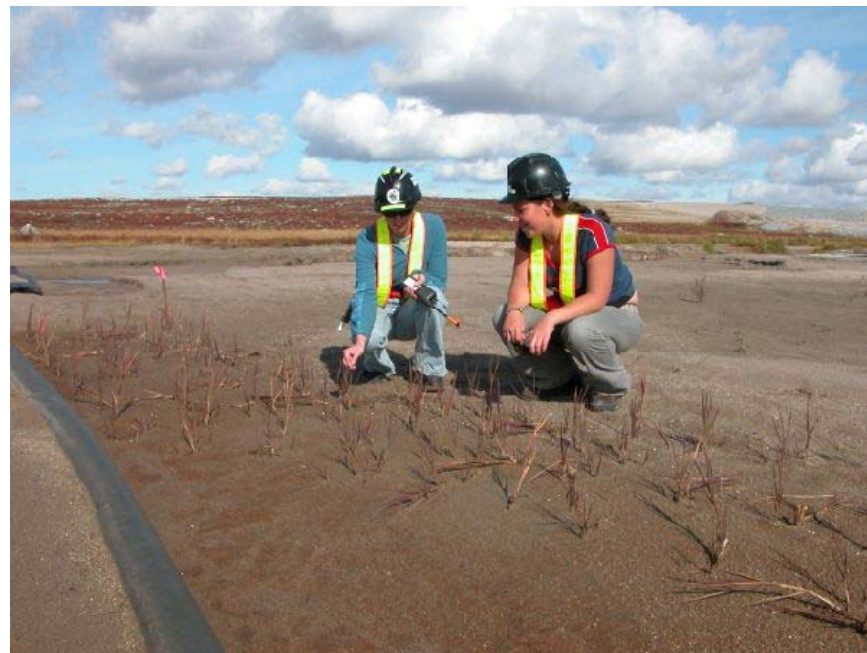
Turcon Laydown, reclaimed in 2003, photo 2003

# Abandonment and Reclamation Recommendation, cont.

## The Agency

### Recommends that;

- The principles for progressive reclamation security should be incorporated into the water licence when the licence is considered for renewal later in 2004.



Reclamation at Fred's Channel, 2003

# Traditional Knowledge

- BHPB is using TK to determine how to divert caribou from the mine
- BHPB declined to provide written documentation of experiences gained from site visits of community members
- Little progress in incorporating TK fully; remains a challenge for all of us



# Traditional Knowledge Recommendation

## The Agency

### Recommends that;

- BHPB should make more explicit efforts to incorporate the use of TK into monitoring, reclamation and other mine operations and reports on its usage in these activities.



Traditional Knowledge  
workshop, 2002

# Regional Monitoring and Cumulative Effects

- BHPB asked that IEMA be replaced with EMAB
- Agency hosted an Aboriginal Caucus to determine how Ekati and other diamond mines can be monitored through a regional monitoring agency
- The Agency is pleased to see that the need for an independent technical panel was recognized by the Aboriginal Caucus

# Regional Monitoring and Cumulative Effects Recommendation

## The Agency

### Recommends that;

- BHPB, DIAND, RWED and others should initiate discussions on how to monitor the regional cumulative impacts on the Bathurst caribou.



Caribou near Ekati, 2003

# Environmental Workshops

- BHPB cancelled the 2003 annual environmental workshops due to:
  - difficulties in communicating technical information through translators
  - internal budget constraints
- BHPB received negative feedback from the Aboriginal members and the Agency

## **Environmental Workshops, cont.**

- Agency hosted the workshop
- Recommendations were forwarded to BHPB and the regulators for consideration
- Workshop was well attended
- Feedback indicated the material presented was easy to understand
- Preference for BHBP to be responsible for presenting its own information



# **Environmental Workshops Recommendation**

The Agency Recommends that;

- BHPB should reinstate its annual environmental workshops in February of each year.
- The MVLWB should add a provision to the renewed water licence ensuring that annual reviews of environmental monitoring programs are undertaken by BHPB in a collaborative, collective process with the affected parties.

# **Agency Highlights in 2003-04**

- Determined Ekati Mine enjoys good environmental performance through collaborative adaptive environmental management
- Conducted a statistical review of the AEMP with DFO, EC and DIAND
- Highlighted regulatory irregularities related to Fox Pit permitting

# Agency Highlights in 2003-04

- Identified deficiencies in the *A&R Plan*
- Agreed to volunteer greater assistance to BHPB to improve A&R Plan
- Increased assistance to communities with technical review prior to deadlines
- Increased our communication activities

# Agency Highlights in 2003-04



**Environmental Workshop hosted by the  
Agency**

# Agency Highlights in 2003-04



**Hosted an Aboriginal Caucus to discuss  
formation of a regional monitoring agency**



# Agency Highlights in 2003-04



**Met with delegation of Premiers from Peru to  
discuss how the Agency works**

# **Agency Recommendations from previous year**

- See page 4 of the Technical Annual Report
- BHPB and regulators must seriously consider our recommendations and respond if they cannot implement them
- Most of the recommendations from 2002-2003 were implemented except those on:
  - TK
  - landfill management

# Progress at Ekati

## Continued development of Fox Pit



March 2003



September 2003



June 2004

# Progress at Ekati, cont.

Underground Mining is underway at Panda Pit





# Progress at Ekati, cont.

BHPB has  
begun to mine  
Beartooth Pit



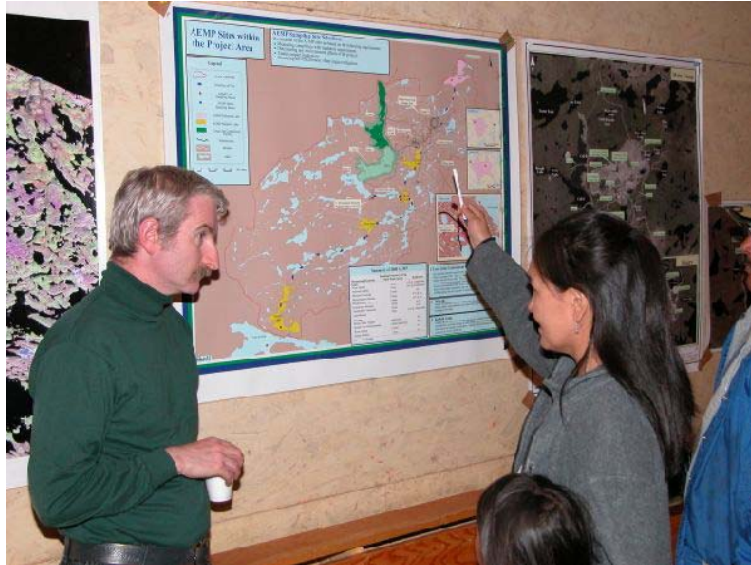


# Agency Focus since April 2004

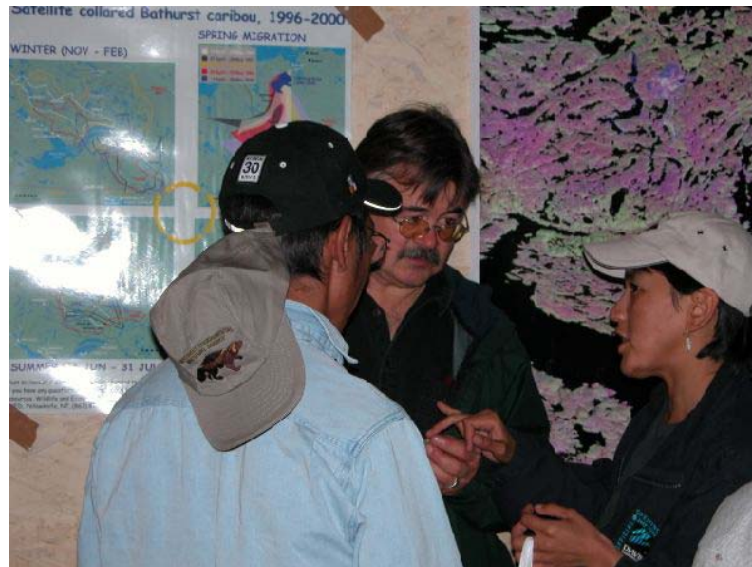


Intervened during the water licence  
renewal process

# Agency Focus since April 2004



Hosted an Open House  
in Kugluktuk August  
2003



# Agency Focus since April 2004

- Adjusting to a difficult working relationship with BHPB
- Participating enthusiastically in BHPB's process to change the management of the LLCF
- Visiting Communities

# Focus for the Future

- Focus on helping improve the A&R Plan
- Reclamation workshop - January 2005
- Changes to the mine plan including management of the LLCF
- Continued efforts to consult with members

# Overall Perspective on Ekati

- Ekati continues to enjoy good environmental performance based on adaptive environmental management
- No significant impacts to the environment have occurred
- Small impacts have occurred but were predicted when the project was approved
- Continued vigilance through inclusive adaptive environmental management is key to success

# How are we doing?

“We continue to rely heavily on IEMA’s comments and recommendations, especially in regards to the technical reports, and trust them to represent our interests well.”

Lutsel K’e Dene First Nation representative



# How are we doing?

“I read (IEMA’s) letter on BHPB’s A&R plan and ... it makes me appreciate that the Agency is there. Although our review touched on some of the issues you discuss...we were not able to do as thorough analysis as you have done.”

DFO Regulator

# How are we doing?

“The IEMA is perceived by many knowledgeable people within the mining industry...that it is an excellent model, one that could and should be replicated elsewhere in Canada and the world.”

Project Director, Peru-Canada project

# THANK YOU



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