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# **Message from the Chairperson**

I am pleased to present to you the 2004-5 Annual Report of the Independent Environmental Monitoring Agency (the Agency). We have put together this plain language report and a more technical one too. This report provides a summary of the Agency's activities and offers recommendations to BHP Billiton (BHPB) and the regulators to help with environmental management at Ekati Diamond Mine.<sup>TM</sup>

Changes in the last year for the Agency involved our manager, Carole Mills, leaving us to return to the Government of Canada. We thank her for her many valued contributions and welcome Kevin O'Reilly as our new manager and Dr. Anne Naeth as a new director.

As stated in previous reports, environmental performance at Ekati continues to be good. To ensure this continues into the future, there needs to be good monitoring programs today. We were pleased with the way BHPB took the lead in the review of the *tailings* area, and also, how the Aboriginal Peoples were involved in providing input into the options.

Most of the Agency's time over the last year was spent on the water licence process for Ekati, the review of *tailings*  management, and regional effects of the mine (especially on caribou). Our major focus now is on planning for the mine's closure. Even though this may be about ten years away, it is important to plan for good closure now to avoid future problems. With the help of DIAND, we held a workshop on *reclamation* and mine closure that helped participants to better understand some important issues for closing Ekati.

As recommended by our Aboriginal members, we spent more time visiting communities and helping them understand what is happening at the mine and we held a board meeting in Kugluktuk at the invitation of the Kitikmeot Inuit Association.

The Aboriginal participation in our environmental workshop helped us to understand concerns about caribou and how better monitoring might be done. Please contact us if you would like us to visit your community, have concerns about the mine, or if you have comments on our activities.

The Agency has had problems with BHPB because the company has several times tried to interfere with the Agency's independence. BHPB denied funding requests from the Agency because it does not agree with some of our activities. For the first time ever, BHPB rejected our work plan and budget for the next two years. The process to settle this disagreement is set out in the *Environmental Agreement*.

We continue to believe that the *Environmental Agreement* and independent monitoring is a good approach to environmental management in the North and we will work together with all of our Society members to make this happen.

William A. Ross Chairnerson

William A. Ross, Chairperson March 31, 2005



## **Agency Activities**

The Independent Environmental Monitoring Agency was formed in 1997 to act as a public watchdog for environmental management of Ekati. We are made up of a Board of Directors, some appointed directly by our Aboriginal Society members, and others appointed jointly by DIAND, GNWT and BHPB. The Agency has two staff with an office in Yellowknife and meets regularly throughout the year. We welcome the comments of our Aboriginal members and the public at any time.

Most of the Agency work involves the review of BHPB's environmental reports and talking with our Aboriginal members and the regulators (see list of regulators). Core activities of the Agency include board meetings, an annual general meeting, preparation of an annual report, an Ekati Mine site visit, and individual director visits to the communities. Additional activities in



Agency board members and staff at mine site

2004 included Agency participation in the water licence renewal public hearing and a community open house in Kugluktuk, Nunavut.

We rely on funding from BHPB to carry out our work. In addition, we relied on partner funding to host or participate in major events. In 2004 three events involved such funding:

- The Reclamation and Closure
  Workshop sponsored by DIAND.
  The Agency hosted and delivered
  the workshop along with a steering
  committee made up of staff from
  the Agency, DIAND and BHPB. The
  workshop provided all participants
  with an opportunity to learn about
  mine reclamation terminology and
  to discuss closure options for mine
  components such as pits, tailings
  ponds, waste rock piles and roads (see
  the Closing the Mine chapter in this
  report);
- The Long Lake Containment
  Facility (LLCF) options and
  analysis process was funded by
  BHPB. We participated in the process
  to learn about the management of the
  tailings at Ekati. Different options were
  looked at on how to best contain the
  tailings while protecting water quality
  (see the Closing the Mine chapter in
  this report); and



• The Ekati Environmental
Workshop that was supported
financially by DIAND. We reviewed
BHPB's aquatic monitoring results
from 2004 and prepared presentations
for our Aboriginal members and the
regulators to discuss the results. We
also hosted a meeting following the
workshop to listen to any concerns
or issues from our Aboriginal
members. The elders at this meeting
provided valuable advice on caribou
monitoring.

## **Evaluating the Agency**

Last year we reported that we would try to improve our working relations with, and the technical advice given to BHPB. These efforts were often sidetracked by differences of opinion on the mandate of the Agency and trying to sort out budget related matters. The Agency and the company were also very busy with the water licence renewal process that extended into 2005. Even so, we were able to direct a lot of attention to wildlife and aquatic monitoring and reclamation of Ekati. We received a lot of positive feedback related to our annual report last year and for the quality of information we provided to our Aboriginal members during meetings.

#### **Agency Mandate**

## To Meet its Mandate in 2004 the Agency



- Review, report and make recommendations on BHPB and government reports and plans.
- Reviewed and provided comments on reclamation and closure, waste rock seepage, wastewater and processed kimberlite management, water licence renewal and aquatic effects monitoring.
- Make recommendations on the integration of Traditional Knowledge (TK) and experience of Aboriginal Peoples into environmental plans and programs.
- Expanded efforts at community consultation with our Aboriginal members led to new recommendations to BHPB and the regulators in 2004.
- Participate as an intervenor in regulatory processes.
- Intervened at the public hearing for the renewal of the Ekati water licence.
- Provide an accessible public repository of all environmental information relevant to the project.
- Maintained a web site which contains copies of reference documents, Agency technical review documents, board meeting summaries, records of incoming and outgoing correspondence, slide presentations and digital photographs.
- Maintained and updated a resource centre of relevant correspondence and reports.
- Provide ways of distributing information to Aboriginal Peoples and the public.
- Hosted the Ekati Environmental Workshop in March 2005.
- Hosted a board meeting and open house in Kugluktuk, Nunavut in August 2004.
- Responded positively to invitations to Agency directors to consult directly with communities.
- Hosted our annual general meeting and prepared a plain language and technical annual report.
- Provide an effective means to bring to BHPB and governments the concerns of Aboriginal Peoples and the general public.
- Provided a forum for Aboriginal member concerns to be shared with BHPB at the Agency annual general meeting and at other events.
- Forwarded recommendations from the Ekati Environmental Workshop to BHPB and the regulators.





## **Mining at Ekati Diamond Mine**

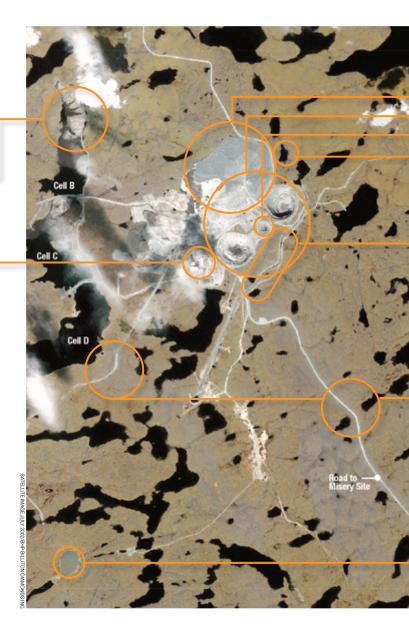
BHPB is mining diamonds on its mineral claims block north of Lac de Gras in the barrenlands of the Northwest Territories (for location site map see inside back cover). The diamonds are contained in large carrot-shaped rock formations, called kimberlite pipes, extending over 300 metres below the ground. Most of the pipes BHPB is mining are located beneath lakes.



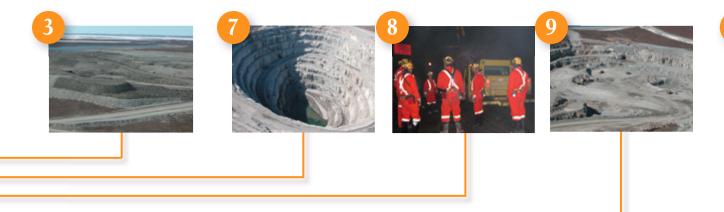
1. Tailings Pond The tailings pond or Long Lake Containment Facility is a former lake that is used by BHPB to contain the very fine *kimberlite* and water mixture that is left over after the diamonds are removed. It has been split into five sections or cells that contain and settle the tailings and allow the water to be filtered by dykes. Once the water leaves the last cell of the *tailings* pond it must be clean enough so that it does not harm the lakes and fish downstream of Ekati. Photo: cell B at the north end of Long Lake



2. Matim Carrip BHPB has built accommodation buildings, a truck shop and process plant. These buildings are some of the biggest in the Northwest Territories. The process plant washes and grinds the kimberlite rock, and separates out the diamonds. Photo: Ekati main camp complex













#### 3. Wøste Rock Piles

Rock that contains little or no diamonds is piled on the ground, usually a short distance from the pit it was taken from. These piles will grow up to 50 metres tall and cover large areas of the tundra. *Photo: Panda/Koala Waste Rock Pile* 

4. Panda Diversion Channel This is a manmade channel that diverts water that would otherwise drain into the pits. It is also being used by arctic grayling for spawning. Photo: The Panda Diversion Channel 5. Hand Roads Roads made of waste rock and quarried rock connect all parts of the mine, including the Misery, Fox and Beartooth sites and other developments. Haul roads may cause problems for migrating wildlife because of steep edges, traffic on the road, or dust. Photo: Haul trucks on Misery Road

6. Fox Pit Fox Pit was the focus of open pit mining in 2004 and is rapidly becoming the largest pit at Ekati. Photo: Mining within the Fox Pit

7. Panda and
Koola Pios Open pit
mining is almost complete
at Koala Pit and is now
complete at Panda Pit. The
pits will fill with water
when the mine is reclaimed
and closed. Photo: Panda Pit

Mining BHPB is currently developing the Panda underground mine and a conveyor to bring the kimberlite to the surface. Photo: Koala North

#### 9. Beartooth Pit

BHPB has started to mine Beartooth Pit. It is the first of three new pits to be mined as part of the mine expansion approved in 2003. *Photo: Beartooth Pit* 



# **10. Misery Site**The Misery Pit is about 30 km

southeast of the main site. BHPB mined at Misery in 2004 and plans to close the pit for a long time.

JIRI HERMANN/BHP BILLITON DIAMONDS INC.

