

# The EKATI MONITOR

Issue #6, October 2001

Newsletter of the Independent Environmental Monitoring Agency

## Annual General Meeting

On June 26th, 2001 we held our Annual General Meeting to report on our activities for the period April 1st, 2000 - March 31st, 2001. Presentations were made by the executive committee on the Agency's annual audit and budget for the 2001 - 2002 year, as well as a summary of the Agency's Annual Report 2000 - 2001 released the week before.

Members of the Society of the Agency commented on our performance and made recommendations for the coming year.



**Agency Annual General Meeting**

Photo: Agency

### Issues raised by our members included:

- A commitment by the Department of Indian Affairs and Northern Development to work towards a regional monitoring agency within two years.
- The Dogrib Treaty 11 Council's support for the activities of the Agency and strong support for a regional monitoring agency.
- The desire of Akaitcho Treaty 8 to have separate appointments to the Board of Directors for the Yellowknives Dene First Nation and the Lutsel'e Dene First Nation.

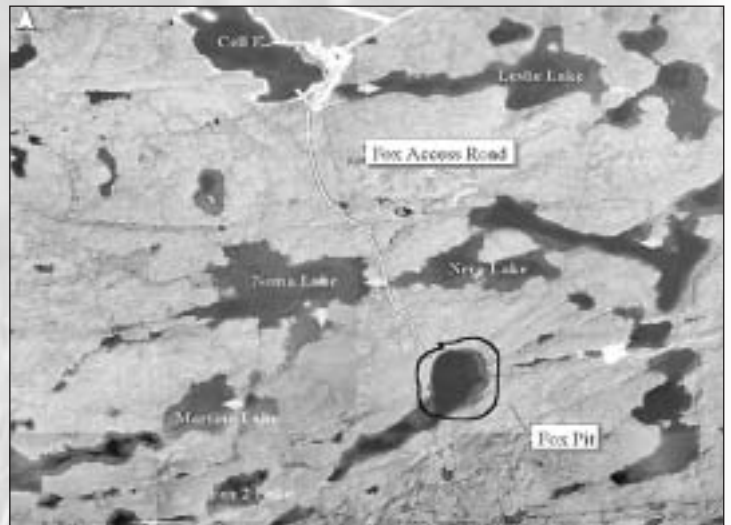
Scott Williams of BHP Billiton expressed his thanks to the Agency for its advice to the company over the year and highlighted specific examples of how the work of the Agency has helped improve environmental management practices on site.

In light of limited attendance at the Annual General Meeting there was some discussion about whether a different time of year may improve participation from our members.

## Fox Pit Application

As reported in our previous newsletter and annual report, BHP Billiton has applied to the Mackenzie Valley Land and Water Board (MVLWB) to dispose of water in Fox Lake, and mine the kimberlite pipe beneath the lake.

In its application BHP Billiton proposed to use a process of land treatment to dispose of both lake and mine water. However, this proposal was withdrawn from the application in early May, immediately prior



**Location of the Fox Pipe**

Photo: BHP Diamonds Inc.

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to the public hearing on the application. The new proposal was that all water not immediately meeting discharge limits would be discharged into the existing Long Lake (Processed Kimberlite) Containment Facility.

A public hearing was held on this application on May 14th, 2001, at which we made a presentation. We expressed our disappointment in the company's decision to withdraw the land treatment option since we saw it as a potentially promising new technique for dealing with on-site water treatment. While we supported the application to dewater the lake, we expressed some concern about the lack of information available at the public hearing for the mining phase of the proposal. The lack of a detailed waste rock management plan and the potential impact of mine water on the processed kimberlite containment facility were issues we highlighted in our presentation.

On June 14th, 2001, the MVLWB recommended approval of a water license for BHP Billiton to carry out the dewatering of Fox Lake. The MVLWB has subsequently sent a number of information requests to the company. These relate to the impact of discharging Fox Pit mine water to the Long Lake Containment Facility, and to the identification of effects predicted downstream. Responses to these information requests were submitted to the MVLWB in early September.

A decision from the MVLWB on mining the Fox pipe is expected some time in the fall.

## Site Visits

Directors and staff of the Agency participate in at least one site visit during the year. Through the rest of the year we rely heavily on the reports of Darren Unrau,



**IACT Members at the Cell B Revelation Plots**

Photo: Agency

the DIAND inspector. Over the years, he has provided high quality reports on mine-site activities and environmental compliance. Darren has recently left the department of Indian Affairs and Northern Development and we would like to thank him for his years of dedication.

On June 28th, 2001 directors and staff attended their annual site visit and on July 16th, 2001 the Manager and Environmental Analyst attended a site visit with members of the Inter-Agency Coordinating Team. Key features viewed on these site visits included: the Long Lake Containment Facility re-vegetation experimental plots, Panda waste rock pile and recently constructed toe berm (designed to control seepage from the waste rock pile), Panda Diversion Channel, and Misery site including the area proposed for land treatment of Misery site wastewater.



**Agency Directors Bill Ross and Marc Stevenson at the Panda Diversion Channel**

Photo: Agency

## Annual Report

In June 2001 we released our Annual Report of the past year's activities. As usual we reported on the company's performance with respect to traditional knowledge, aquatic and wildlife effects, reclamation research, and waste rock and processed kimberlite management. We also included our financial audit for the 2000-2001 financial year.

The Annual Report was distributed to a mailing list of over 300 and has been posted on the Agency's website at [www.monitoringagency.net](http://www.monitoringagency.net) (follow the links to Annual Report 2000 - 2001).

If you have any comments on our annual report, or would like a copy (paper or CD), please do not hesitate to contact our office.



## 2000 - 2001 Recommendations

The following section presents our recommendations for the year:



**Toe Berm on the Panda Waste Rock Pile**  
Photo: Agency

### Traditional Knowledge...

1. We recommended that: 1) aboriginal parties meet to develop consensus where they and their knowledge best fit into BHP's environmental management and monitoring programs, and 2) aboriginal members and BHP work together to develop more effective means to incorporate aboriginal people and their ecological knowledge into BHP's planning and operations. The Agency, if requested, would be available to assist in these initiatives.

### Aquatic Effects ...

2. We recommended that BHP expand the Aquatic Effects Monitoring Program to include a full range of water quality data in the winter months for all Aquatic Effects Monitoring Program and Special Effects Monitoring Program lakes.
3. We recommended that BHP analyze and determine the sources of substances affecting water quality by using the full range of data from all programs and studies that collect water quality data at the site (i.e. aquatic & special effects monitoring programs, seepage surveys, snow surveys etc.).

### Special Effects Monitoring Program...

4. We recommended that BHP place priority in 2001 on determining whether the very slow growth rates of young-of-the-year grayling rearing in the diversion channel adversely affect their survival.

### Waste Rock Management...

5. We recommended that BHP develop a more detailed understanding of

what is happening with the waste rock geochemistry at EKATI™ and determine effective management responses that may be needed to deal with the emerging water quality problems at the site.

6. We recommended that BHP should update its Waste Rock Management Plans for Misery, Koala, Fox and other pipes to be developed. It should also ensure that these designs are properly reflected in the current Waste Rock & Ore Storage Management Plan and Abandonment & Restoration Plan.

### Cumulative Effects...

7. We recommended that BHP take immediate actions to improve waste management in order to reduce risks that wolverines and grizzly bears become attracted to camps. Prompt actions are needed at Misery camp where the cumulative effect on carnivores is of greater concern.



**Director Marc Stevenson at a Fish Box in the Panda Diversion Channel**  
Photo: Agency



**Waste Incinerator at the Misery Camp**  
Photo: Agency

## Expansion Update

BHP Billiton plans to mine three new pipes (Sable, Beartooth, and Pigeon) north of the present development. The proposal was referred to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) for environmental review. The MVEIRB issued its recommendation for approval in February, 2001, along with sixty-two recommendations to minimize environmental and social impacts.

The Minister of Indian Affairs and Northern Development subsequently took issue with the fact that the MVEIRB had issued the majority of its recommendations without having made a finding of a related "significant adverse impact", as required by the Mackenzie Valley Resource Management Act. In its report the MVEIRB had found only two issues that might cause significant adverse impact so that, according to the Minister, only those two recommendations could stand. The Minister decided (after consulting with the MVEIRB) that the rest of the recommendations would stand as "observations". The difference between an observation and a recommendation is that during the regulatory process, the regulators MUST follow recommendations whereas observations need only be considered.

With respect to the land-use permit and water license application for the Sable haul road, the Agency submitted recommendations for improving environmental management practices for the protection of caribou and grizzly bear movement and habitat during road construction and use. The proposal to mine the new pipes has now moved to the regulatory phase so that BHP Billiton can acquire the necessary land-use permits, water licenses and fisheries authorizations. As the company has applied for a Class A water license, a public hearing will have to be held by the Mackenzie Valley Land and Water Board.



**Grizzly Sow and Cubs**  
Photo: RWED/GNWT

## Operating Environmental Management Plan

Five components of BHP Billiton's OEMP must be updated regularly and approved by the Mackenzie Valley Land and Water Board. These include:

- Waste Rock and Ore Storage Management Plan
- Wastewater and Processed Kimberlite Management Plan
- Spill and General Contingency Plan
- Interim Abandonment and Restoration Plan
- Quality Assurance/Quality Control Plan

BHP Billiton submitted revisions of these to the MVLWB in spring 2000. After an initial review the MVLWB rejected the plans and requested BHP Billiton do further work to make them acceptable. The Agency also identified some deficiencies, particularly in relation to the pit rock testing program.

The company recently re-submitted these updated plans and the MVLWB is expected to make a decision on their approval in the near future.



**Panda Waste Rock Pile**  
Photo: Agency



**Tailings Discharge into Cell B of Long Lake**  
Photo: Agency

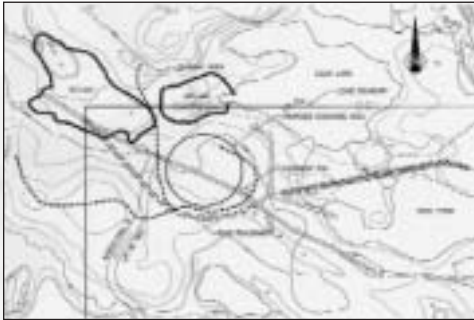


**Cell B Re-Vegetation Plots in Long Lake**  
Photo: Agency



## Misery Wastewater Land Treatment

A significant change in BHP Billiton's plans at the Misery pipe is to use a process called land treatment to deal with wastewater at the Misery site. Land treatment is a method of dispersing water over the tundra where natural chemical processes and filtering are expected to breakdown contaminant's in the water.



**Proposed Area for Misery Land Treatment**  
Photo: BHP Diamonds Inc.

Water flowing into the pit and seepage from the rock piles will be collected and routed to King Pond, which recently had a large dam constructed downstream to increase its storage capacity. Each year, water will need to be discharged from King Pond, and Misery water is expected to be high in nitrogen compounds from blasting, and potentially heavy metals from the oxidation of Misery schist in the waste rock piles.

The Agency has reviewed the proposal and in late July provided our comments to the MVLWB. We supported the proposal but recommended detailed monitoring studies to determine the success of the process and the level of any environmental impacts. Since then, the MVLWB has stated that BHP Billiton will require a new class B license for the proposed land treatment.

## Waste Rock Seepage



**Waste Rock Seepage Monitoring**  
Photo: Jiri Hermann/BHP Diamonds Inc.

For a couple of years now, the Agency has been concerned about the appearance of acidic drainage in waste rock dumps at the mine; drainage that was not predicted in the company's original EIS.

BHP Billiton has been researching this problem, and produced a study of waste rock drainage geochemistry in February 2001. This study, identified a number of explanations for the acidic drainage, and these were reviewed at a meeting on April 23rd, 2001, with regulatory agencies and the Agency, along with our consultant Kevin Morin, in attendance.

The meeting resulted in recommendations for this summer's monitoring program and some proposed mitigation to prevent any adverse impact on the environment. One explanation for the high acid drainage was that acidic tundra water may be breaking down pieces of kimberlite found near the base of the waste rock pile.

Since then the company has completed construction of a trial toe berm that has the potential to trap seepage within the waste rock pile and prevent its escape to the environment.

BHP Billiton is expected to report on the seepage survey later this year.



**Proposed Area for Misery Land Treatment**  
Photo: Agency

# Making the Agency Available to our Members, Communities and the Public

The Agency has worked hard over the last year to make our work and issues relating to environmental management at EKATI™ more available to our members. Listed below are some of the initiatives and activities that the Agency has carried out to communicate with our members, communities and the public.

## Chair

As previously reported the Chair of our board, Red Pedersen has committed to making himself available for a portion of the year to meet with our members and carry out other communication activities. Red would be happy to visit your community or meet with you next time you are in town. Do not hesitate to contact our office to set up a meeting.

## Website: [www.monitoringagency.net](http://www.monitoringagency.net)

The Agency's website was upgraded in July of 2001. More documents have been added, and a user-friendly list of documents in the Agency's resource library has been created. Over the next while, the Agency hopes to add more documents to the site. All of the Agency's annual reports, newsletters, a large amount of board meeting minutes and minutes from the meetings of IACT are already available for viewing on the website.

## Resource Library

The Agency's resource library includes a large amount of material relating to activities at EKATI™ and general environmental management issues in the north. The resource library is available for viewing during office hours, and our members and the public are welcome to make copies of documents of interest. The Agency has also offered the use of our board room and facilities to our members whenever needed.

## Meetings of the Inter-Agency Coordinating Team (IACT)

IACT is a group of representatives from government, regulators, BHP Billiton and the Agency. Meetings are held every month in the office of the Agency. The meetings are an opportunity for the various organizations responsible for environmental studies, regulation and enforcement to review activities on site and engage in open dialogue on current issues.

If you would like more information on the purpose or activities of IACT, please view the minutes of IACT available on the website, or contact our staff.

## Agency Board Meetings

The Agency directors meet at least six times per year. At these meetings the directors regularly meet with BHP Billiton, representatives from the department of Indian Affairs and Northern Development and the department of Resources, Wildlife and Economic Development. Agency directors also make efforts to meet with our aboriginal members whenever possible.

## Meeting with our Aboriginal Members

Directors and staff of the Agency meet with representatives from our aboriginal members whenever possible to report on the work of the Agency and activities at EKATI™. Examples include a trip to Lutsel'ê to meet with the Wildlife, Lands and Environment Committee, and meetings with traditional knowledge researchers from aboriginal organizations.

The Agency continues to look for more effective methods of communicating with our aboriginal members. If you would like us to meet with you or your representatives, please do not hesitate to contact us through our staff.

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## New Appointments



Director - Tim Byers  
Photo: Agency

The Agency has recently seen two new appointments to our Board of Directors: Tim Byers an environmental consultant from Winnipeg, Manitoba has been appointed as director for the Akaitcho Treaty 8. Bob Turner, vice-president of the North Slave Metis Alliance (NSMA) has been appointed as interim Director for the NSMA.

## Reappointments

Following the annual general meeting the board of directors unanimously reelected the executive committee of the Agency to their positions for another term of one year. Congratulations to:

Red Pedersen - Chair  
Bill Ross - Vice Chair  
François Messier - Secretary-Treasurer



## Agency Activities: April 1st - August 31st, 2001

April 19th - Reclamation meeting attended by Robin Staples

April 23rd - Seepage Meeting attended by Bill Ross, Pete McCart, Tony Pearse, Consultant Kevin Morin and staff Zabey Nevitt and Robin Staples

April 30th - Wildlife Effects Monitoring Program Meeting attended by François Messier and Zabey Nevitt

May 11th - IACT Meeting attended by Zabey Nevitt and Robin Staples

May 14th - Mackenzie Valley Land and Water Board Public Hearing on Fox Pit application - attended by Red Pedersen, Bill Ross and staff Zabey Nevitt and Robin Staples

May 14th - Department of Fisheries and Oceans Lake Habitat Compensation Fund Advisory Committee meeting attended by Robin Staples

June 1st - Presentation by BHP Billiton consultant on Dissolved Oxygen in Arctic Lakes attended by Zabey Nevitt and Robin Staples

June 15th - IACT Meeting attended by Zabey Nevitt and Robin Staples

June 18th - Independent Environmental Monitoring Agency Annual Report 2000 - 2001 released

June 26th - Annual General Meeting 2001

June 27th - 24th Board of Directors Meeting

June 28th - Directors and Staff EKATI™ site visit

July 16th - IACT EKATI™ site visit attended by Zabey Nevitt and Robin Staples

July 25th - Agency's website upgrade completed

August 6th - 10th - Dogrib Treaty 11 Council Annual General Assembly attended by Zabey Nevitt

August 20th - 24th - Acid Rock Drainage Course attended by Robin Staples



**Acid Rock Drainage Course Participants on Site Tour**

Photo: Agency



**Environmental Analyst**  
**Robin Staples**  
Photo: Agency

## New Staff Position

In April 2001, the position of Communications Administrator was ended, and the new position of Environmental Analyst created. Robin Staples has been appointed to this new position. Robin's new duties include reviewing environmental data released from BHP Billiton and preparing reports for management and directors.

Over the last few months Robin has been carrying out a review of sets of environmental data relating to water quality.

### Reports and Documents Mentioned in this Newsletter and Available from the Agency Office

- Annual Report 2000 - 2001: Independent Environmental Monitoring Agency: June 18th, 2001.
- Letter to MVLWB: BHP's Application to Construct the Sable Haul Road (Applications MV2001L2-0004 & MV2001F0032): Independent Environmental Monitoring Agency: July 16th, 2001.
- Operating Environmental Management Plan: BHP: February 2000.
- Mackenzie Valley Land and Water Board Update (to OEMP): BHP: June 2001.
- Letter to MVLWB: BHP Billiton's Wastewater and Processed Kimberlite Management Plan: Proposed Land Treatment of Misery Water: Independent Environmental Monitoring Agency: July 27th, 2001.
- Panda Waste Rock Storage Area Beartooth-Bearclaw Drainage 2000 Seepage and Waste Rock Survey Report EKATI™ Diamond Mine: Prepared for BHP Diamonds Inc. by SRK Consulting: February 2001.

### Directors

Chair	Red Pedersen	(Kitikmeot Inuit Association Appointee)
Vice-Chair	Bill Ross	(BHP, Canada and GNWT Appointee)
Treasurer	François Messier	(BHP, Canada and GNWT Appointee)
	Bob Turner	(Interim North Slave Metis Alliance Appointee)
	Tony Pearse	(Dogrib Treaty 11 Council Appointee)
	Pete McCart	(BHP, Canada and GNWT Appointee)
	Tim Byers	(Akaitcho Treaty 8 Appointee)

### Staff

Manager:	Zabey Nevitt
Environmental Analyst:	Robin Staples

## How to Reach Us...

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**Email:** monitor@yk.com (Zabey)  
monitor2@yk.com (Robin)

**Website:** www.monitoringagency.net

**Office Hours:** Monday - Friday  
8:30 am to 12:00 noon, 1:00 pm to 5:00 pm

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