

**Independent Environmental Monitoring Agency
73rd Meeting of the Board of Directors
Kugluktuk, Nunavut and Yellowknife, NWT
March 15-17, 2011
Summary of Discussion**

Revised: March 30, 2011

Directors

Bill Ross
Tim Byers
Audrey Enge
Laura Johnston
Jaida Ohokannoak
Kim Poole

Guests

Stanley Anablak, Kitikmeot Inuit Association (KIA)
Luigi Torretti, KIA
Kathy Racher, Wek'èezhii Land and Water Board (WLWB)
Mathieu Dumond, Government of Nunavut

Staff

Kevin O'Reilly, Executive Director

MARCH 15TH

Meeting commenced at 8:30 am in Yellowknife at the Agency's Boardroom.

MEETING WITH WEK'ÈEZHÌI LAND AND WATER BOARD (WLWB) STAFF: KATHY RACHER

➤ **Discussion on Adaptive Management**

Kathy Racher had requested an opportunity to meet with Agency Directors and staff to informally discuss adaptive management in the context of aquatic effects monitoring.

Kathy mentioned that she had received a good response when she discussed the draft Management Response Framework with the staff of the Mackenzie Valley Environmental Impact Review Board. She had also been to an International Association for Impact Assessment (IAIA) session in Vancouver in January on adaptive management. It appears that the NWT is probably much further ahead than southern jurisdictions with regard to adaptive management.

Kathy is particularly interested in how resource management bodies learn from individual projects and how those lessons are applied to a broader context, including adjustments to models and application of findings to future projects. She noted that this step appears to be missing from the Agency's discussion paper on the Environmental Impact Report (EIR).

Bill mentioned that adaptation can take many forms including further study, mitigation, changing models, or regulatory responses (e.g. reduced or increased discharge levels). The WLWB and other boards are the link for learning or adaptive management that can then be applied to other projects. The example of the follow-up studies on the Churchill, Hayes and Nelson rivers in Manitoba was used, as the discovery of mercury in aquatic systems was then a line of inquiry in subsequent hydro-electric project review. There was also a 1990 UN study on follow-up.

Kathy mentioned her interest in helping to organize a local IAIA event or workshop in Yellowknife with an adaptive management focus. The EIR for Ekati might serve as an interesting case study in adaptive management.

For a recent oil sands project, the regulators defined significant adverse effects as impacts to species at risk, either harm to individuals or their residences. Off-sets and research could be

used to mitigate for no net loss. Adaptive management requires that proponents manage effects in relation to effluent quality criteria and environmental objectives. The differences between water and wildlife management objectives, approaches and reviews were discussed.

There is a need for both indicators and protocols to ensure effective overall management of human impacts

AGENCY BUSINESS

➤ **Information Updates**

Bill – Interviewed by the *Yellowknifer* on the NWT Wildlife Act. Indicated Agency support for regulating wildlife monitoring and management plans.

Jaida—Worked on the 2011-13 Agency work plan and budget, reviewed the timeline project, assisted with logistics for the Kugluktuk meeting, and started to review the draft communications strategy.

Laura—Reviewed snow sampling methods and analysis to provide advice to BHPB, began reading the draft CCME nitrate guideline, and started to review the draft communications strategy.

Audrey—Busy with other Boards as she now serves as an alternate on the Diavik Environmental Monitoring Advisory Board (EMAB), but has stepped off the Diavik Community Advisory Board. A Minister's Report was issued on Diavik's 2010 Annual Report due to deficiencies identified in its air quality monitoring program. This may present an opportunity for better coordination of air quality monitoring between BHPB and Diavik.

Kim – Reviewed Diavik's response to the wildlife monitoring program review workshops held in June and October 2010, reviewed BHPB's wildlife research permit application, mentioned changes in GNWT wildlife staff as Steve Matthews will be leaving in June and Sue Fleck in September. Staying in touch with parties on the wolverine sampling program scheduled for April 2011.

Tim—Reviewed the timeline project website and provided comments to Monica, and previewed the Falcon Trails facility where the Agency will meet in May to work on its 2010-11 Annual Report.

Kevin –Put together a table with some initial thoughts for the 2010-11 Agency Annual Report including activities and comments using the table of contents listing from last year's report. The EIR discussion paper was distributed with limited but positive feedback. The last of the contributed services, office cleaning, was transferred to the Agency. The draft Agency budget and work plan for 2011-13 was put together along with the variance report. The revegetation sustainability criteria contracts with Dave Polster and David Walker were initiated and the work is well underway. The draft CCME guideline on nitrate was reviewed and circulated to Directors. The preparations and logistics for the Kugluktuk trip were completed with Monica. The Agency slides and photos were all scanned and returned to the Agency. A database of the photos is being considered. Monica completed a major overhaul on the timeline project website in preparation for a formal launch in late March when she returns to work from the flu.

➤ **Financial Report**

Jaida reviewed the 2010-11 Year-to-Date (YTD) Expenditures and Variance Report. Spending for all categories is roughly on track except for Board meetings. One less Board meeting will be held than was in the original budget and for the last couple of Board meetings, not all Directors were able to attend in person. The Agency is heading for a surplus of as much as \$40k. Some ideas for other expenditures before year-end were discussed.

Action Item #1 Kevin to check with accountants on how potential expenditures on IEMA-embazoned jackets or sweaters for Directors and staff should be handled.

The draft 2011-13 Agency budget and work plan was discussed. It was noted that it contains provisions for four Board meetings (including one in a community) with all Directors in attendance. This is an area where there may be some slippage that can be monitored during the year and redirected to other areas such as document review.

The Board of Directors approve the 2011-13 Agency Work Plan and Budget as drafted.

Moved by Kim Poole. Seconded by Laura Johnston. Carried unanimously.

AGENCY 2010-11 ANNUAL REPORT

The logistics for the Agency's Annual Report writing session scheduled for May 2011 outside of Winnipeg were discussed. Directors and staff will book their travel immediately and send details to the Yellowknife office. This will allow better coordination of travel to and from Falcon Lake. The plan is to arrive on the evening of May 9 and leave after lunch on May 12.

Action Item #2 Directors and staff to book their travel to Winnipeg for the May Annual Report writing session and send the details to the Yellowknife office.

The table prepared by staff with some initial ideas for the Annual Report was discussed. Several additional items are to be added including assignments, number of words in last year's report and anticipated length for the current report. Some additional information for the Annual Report is to be gathered beforehand.

Action Item #3 Kevin to revise the Annual Report table to reflect the discussion at the Board meeting and distribute it in advance of the May meeting.

Action Item #4 Kevin to check with Anne Wilson as to the next step for monitoring of dioxins and furans at Kodiak Lake (benthic invertebrates and/or fish).

Action Item #5 Kevin to send an e-mail to Eric requesting an initial, informal meeting with Charles Klengenber, BHPB Traditional Knowledge Advisor.

FOLLOW-UP ITEMS

➤ **EIR Discussion Paper**

This paper was distributed by e-mail at the end of January. Limited but positive feedback has been received to date. Luigi Torretti, who was in attendance during this discussion, thanked the Agency for being proactive on this issue.

➤ **NWT *Wildlife Act***

It was suggested by GNWT staff that a letter outlining the Agency's position on the *Wildlife Act* may be helpful. The Directors were supportive of this idea provided that the issue of how the regulation of wildlife monitoring programs and plans as proposed in the Act would apply to Ekati.

Action Item #6 Kevin to draft a letter to GNWT regarding support from the Agency for the regulation of requirements for wildlife monitoring programs and plans and that this should also apply to Ekati.

➤ **Mine Closure 2011 Conference**

The Agency submitted an abstract of a paper for possible presentation to the conference organizers. It was not accepted but the Directors were of the view that it would still be valuable to send a Director and staff to this conference

Action Item #7 Tony, Kevin and Monica should register for the Mine Closure 2011 conference as soon as possible.

➤ **Revegetation Sustainability Criteria Contracts**

Following the last Board meeting, staff prepared and circulated a draft statement of work for consultants on revegetation sustainability criteria given the Agency's continuing interest in this area. This work will better inform the Agency on this topic and allow for a better evaluation of any work that BHPB may undertake. Dave Polster and David Walker both separately agreed to undertake a literature review on this topic and to review BHPB's revegetation research to date.

➤ **Diamond Mine Wildlife Effects Monitoring Program (WEMP) Review and BHPB Wildlife Monitoring Program Research Permit Application**

Despite the Agency's letter of January 2011 recommending a formal response by BHPB to the June and October diamond mine wildlife monitoring program workshops, no such response has been received to date. The Agency did receive a copy of the application by BHPB for its wildlife research permit for the 2011 wildlife monitoring program.

The Agency is concerned with the uncertainty of the outcome of the diamond mine wildlife monitoring program review. It appears that there has been a substantial reduction in monitoring effort without redirecting resources into more relevant and useful objectives and methods. For example, there is still no grizzly bear monitoring and no protocol for restarting the aerial caribou surveys.

In reviewing the 2011 wildlife research permit application for Ekati, Directors identified a number of concerns. Rather than attempt to address these concerns directly to GNWT as part of the permit review process, it was decided that an Agency letter should be sent directly to BHPB and copied to all Agency society members as soon as possible.

Action Item #8 Kim to draft a letter for the Agency regarding its concerns with wildlife monitoring at Ekati.

➤ **Agency Communications Strategy**

Laura and Jaida have started to review the draft Agency communications strategy. Board direction is required in terms of target audiences and priorities. Laura, Jaida and Monica will work together to shape and develop the draft for further discussion by the full Board.

Action Item #9 Laura, Jaida and Monica to work together to develop the communications strategy for further discussion at the next Board meeting.

MEETING WITH KITIKMEOT INUIT ASSOCIATION (KIA) STAFF: LUIGI TORRETTI AND STANLEY ANBLAK

The Directors and staff met with the KIA Lands and Resources staff at their Kugluktuk office. The KIA staff gave a general presentation on the structure of the office and its responsibilities. There

are currently four employees including the Director, Senior Environment Officer, Senior Lands Officer and an administrator. Two more positions will be recruited shortly for regulatory and permitting work. KIA has six Board members including the President, Vice-President, Secretary-Treasurer, and three Directors at-large. The Inuit of Nunavut own lands with surface rights only and lands with both surface and subsurface rights. These are known as Inuit owned lands (IOL) and were selected through the Nunavut Land Claims Agreement for both cultural and economic values. The Regional Inuit Associations (RIA) in the Kitikmeot, Kivalliq and Qikiqtani are responsible for managing the surface rights on IOL for their region. Nunavut Tungavik Incorporated (NTI) is responsible for managing the subsurface rights on these lands.

A Nunavut-wide land use plan is being developed by the Nunavut Planning Commission. Public hearings will be held on the draft plan. Future developments will have to be in conformity with the Nunavut Land Use Plan or get an exemption in order to proceed through the regulatory phase.

KIA regulates the use of Inuit owned lands in its region through land use permits similar to Crown lands. There are standard operating conditions attached for the three land use classes (i.e. minor land uses, middle range exploration programs, and advanced exploration). A flat fee of \$500 is charged for a permit that usually lasts for up to two years. One renewal is usually permitted. Financial security is usually required based on expert reclamation liability estimates. The RECLAIM model is not used. KIA usually requests a letter of credit although cash was held in the past.

Issues have arisen in the past with financial security. For example, Indian and Northern Affairs Canada (INAC) is using the financial security from Tahera for the Jericho mine to keep it in care and maintenance when these funds were actually meant for reclamation.

AGENCY-SPONSORED OPEN HOUSE IN THE GYMNASIUM OF THE JIMMY HIKOK ILIHAVIK SCHOOL (WEDNESDAY MARCH 16 AT 5 PM)

With the assistance of the Hamlet of Kugluktuk, the Agency sponsored an Open House in the elementary school gymnasium. About 20-30 adults and same number of children were in attendance. Mona Tiktalek provided simultaneous interpretation of the presentation by the Agency, followed by a question and answer session.

Bill Ross provided a general presentation on the Ekati mine, the Agency and its mandate, and an overview of the water, air and wildlife monitoring programs. The following questions were raised by the residents in attendance:

- Has monitoring detected any changes and are they good or bad?

The Agency responded by stating that the purpose of the monitoring programs was generally to detect changes from the conditions before the Ekati mine started operating. Most of the changes to date are not significant or cause for concern as long as the company continues to carry out the proper monitoring, mitigation and research.

- Are the open pits to be filled in again?

The Agency noted that BHPB plans to fill the pits by flooding them using water from nearby lakes without affecting those source lakes. Fish are now to be allowed back into these pit lakes, provided that the water is safe. BHPB will be conducting more research on these matters.

- What happens to the animals that are killed by accidents at the site?

It was noted that most of the incidents that result in dead wildlife are small animals such as ptarmigan or arctic hare. If there is anything unusual, a report may be made to GNWT and the

dead animal may be given to GNWT. Otherwise, the dead animal is put into the incinerator and burned.

- What are the effects of the changes to zooplankton noted at the Mine site?

This is not clear and the Agency has asked the company to better link the results of its monitoring programs. Fish sampling is only done every five years because many of the water bodies are small and have a small fish population.

PRESENTATIONS BY AGENCY DIRECTORS IN THE JIMMY HIKOK ILIHAVIK SCHOOL AND KUGLUKTUK HIGH SCHOOL

Agency Directors made presentations on environmental monitoring and Ekati to the Grade 4 and 6 classes at the elementary school and the Grade 10-12 class at the high school. The potential for work in the environmental fields was emphasized along with the need to stay in school.

MEETING WITH DEPARTMENT OF SUSTAINABLE DEVELOPMENT, GOVERNMENT OF NUNAVUT STAFF: MATHIEU DUMOND

Mathieu Dumond, the Kitikmeot Regional Biologist for the Government of Nunavut met with the Agency Directors and staff to discuss his findings regarding grizzly bear (and wolverine) DNA sampling using hair snagging. Posts identical to those used by Robert Mulders, GNWT for the wolverine hair snagging were piloted in a 6000 km² study area using 7 by 7 km cells. The sampling was done in 2005 and 2006 in the winter, spring and summer with a focus on wolverines. In 2008 and 2009 the focus was switched to grizzly bears using a 10 by 10 km cell size over 40,000 km² with two sample cycles. Remote cameras were added in 2009. Both grizzly bear and wolverine hairs were captured and sampled using DNA analysis.

Some of the findings are highlighted below:

- Wolverine home ranges in that area were much larger than previously thought;
- Grizzly bears tend to follow caribou and green-up of the tundra;
- A 10 by 10 km cell size works for grizzly bears with a 10 day turnaround time between sampling sessions;
- Guard hairs work better than underfur for DNA genotyping;
- Similar composition of single vs. families for bear was found using cameras, aerial observations during sampling and from the hair samples themselves;
- Hair samples can also be used for population assessments, to possibly measure stress and hormone levels, carnivore diet, landscape use and muskox genetics; and
- Sample quality assurance and characterization allows for sub-sampling and appropriate hair selection.

In the discussion that followed, there did not appear to be any advantages to using pyramids or tripods for sampling purposes as the single posts did the job well and were logistically easier to deal with.

OTHER BUSINESS

➤ Future Board Meetings

The dates of future Agency Board meetings were reviewed and proposed as follows:

June 22-24, 2011 Ekati site visit

September 12-16, 2011 Community Visit (possibly Whatì)

November 14-18, 2011 Agency AGM and Environmental Workshop

February 2012 Agency Board meeting

Action Item #10 Kevin to check dates of the Ekati site visit with BHPB and with the Tłı̄chǫ Government staff regarding a September community visit to Whatì.



Summary of Discussion Approved by
Jaida Ohokannoak, Secretary Treasurer.