

***Independent Environmental Monitoring Agency
36th Meeting of the Board of Directors
Yellowknife, Northwest Territories
October 26th to 28th, 2003
Summary of Discussion***

Revised: February 3rd, 2004

Directors

Red Pedersen	Tim Byers
Bill Ross	Tony Pearse
François Messier	Peter McCart
Dave Osmond	

Staff

Carole Mills	Sean Kollee
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The meeting was called to order by the chairperson at 10:00 am on Sunday October 26th, 2003. The agenda was reviewed and accepted with the following addition:

- David Livingstone (DIAND) was added to the agenda to discuss the potential formation of a regional monitoring agency involving the Agency and EMAB.

Information Updates:

Red asked the KIA to relieve him of his duties at the Agency due to his retirement. The KIA is conducting a replacement search. He will continue at the Agency until he is replaced to ensure quorum for the Agency Society membership. The consultation of the Agency visit in Kugluktuk in September was a success at describing the activities of the Agency. Red was also the recipient of an honorary membership of the KIA.

Bill reviewed the BHPB *Abandonment and Reclamation Plan*, the AEMP third party review plan and aided in preparing the annual general meeting (AGM) annual report slide presentation.

Tim attended an aquatic toxicity workshop in Ottawa.

Pete was involved in reviewing the BHPB nitrate toxicity study and the possibility of using lake trout and lake whitefish eggs from locations outside of the Koala drainage.

Tony was involved in the review of the interim *Abandonment and Reclamation* plan and met the Peruvian Delegation in Yellowknife that was interested in the Agency.

François reviewed the protocol for the AEMP third party review, the interim *Abandonment and Reclamation* plan and corresponded with Carole related to financial matters.

Dave toured the Ekati mine at the end of the last Agency meeting and was involved in the AEMP third party review, reviewed the baseline report for the Sable, Pigeon and Beartooth expansion and attended an aquatic toxicity workshop in Ottawa.

Carole attended a Misery land treatment steering committee meeting, discussed the delays in the program and worked on the AEMP third party review and the AGM. She visited Kugluktuk and the KIA with Red, met the Peruvian delegation with Tony, was interviewed for radio and CBC TV on the Fox Lake issue and attended the course and workshop on aquatic toxicity in Ottawa.

Sean attended a training session on acid rock drainage and toured acid producing mines in B.C. He worked on preparing the Agency for the AGM and was involved in web updates, distributing correspondence and the annual report distribution.

ADMINISTRATION

Finance and Administration

As of September 30th 2003 the Agency has spent approximately 38% of its budget. This is in line with the pattern of the previous year. Extra costs incurred so far include extra pages and photographs for the annual report.

Human Resources

The Directors discussed Sean's employment status and approved a performance-based salary increase and an inflation based increase.

Comments on the Completed 2002-2003 Agency Annual Report

Directors found the annual report to be very satisfactory. Carole mentioned that DFO has already submitted comments on the Agency recommendations relevant to it.

Action Item #1 – Carole to draft a thank you letter to Outcrop.

Nitrate Toxicity Study

Pete mentioned that Rescan attempted to locate fish eggs from locations in Ontario and Great Slave Lake after it was determined that only a small amount of eggs could be recovered from Ekati this year. Pete advised BHPB that conducting a study on non-native fish species would at least provide some valuable information as long as the discussion mentions the differences between the habitat the fish are adapted to and that at Ekati. Trout eggs from Lake Simcoe will be used as well as lake whitefish eggs from Great Slave Lake. The northern brood would likely be less resistant to nitrate than the southern broods. This must be kept in mind when interpreting the results of the study.

LLCF Management

It was confirmed that BHPB did plan in its environmental impact statement to pump over the Dyke D when necessary.

Agency Role in BHPB Annual Environmental Workshops

BHPB asked if the Agency would take on the role of designing the annual BHPB public environmental workshops. It proposed that all technical reports would be presented in December 2003. A public plain English version would be prepared for February 2004. BHPB's consultants would be given a primer by the Agency on how to do plain English presentations so they could adjust their presentations prior to the February workshops.

The Directors agreed that the Agency should help design the workshop in order to increase the amount of community participation and feedback. The Agency must ensure that there is no blurring of the distinction between BHPB and IEMA roles in the view of the community participants. The Agency should not be involved in facilitating the workshop and must be able to pose technical questions to BHPB. BHPB must chair the workshop in order to be able to commit to possible changes of its management plans proposed by the participants.

AEMP Third Party Review

Staff had hoped to have the ToR prepared in time such that the results would aid in BHPB's water licence renewal application package. In August, BHPB committed to reviewing the ToR quickly. However, this was not completed until very recently (October 24th). The comments received did little to change the ToR. Selecting copper instead of mercury has been suggested by the steering committee because of its high quality data set compared to mercury. This was agreed to by the Directors to consider mercury as a fourth parameter should the budget allow.

BHPB Abandonment and Reclamation Plan

The results of the Agency's review were submitted to the MVLWB. The main finding was that the new A&R Plan was substantively deficient and should not be approved until major deficiencies are remedied. The Directors advised that BHPB and the regulators should work together to develop closure criteria because BHPB needs to implement whatever criteria are developed by the regulatory community.

Potential Joint IEMA/EMAB Board Meeting

The Directors advised that if a joint IEMA/EMAB Board meeting should occur then harmonization of the existing environmental management plans, a mechanism of a RMA formation and sharing of resources should be on the Agenda.

Discussion of Hiring a Consultant to Review the BHPB Waste Rock Seepage Survey

Directors agreed to hire a consultant for the review once the 2003 seepage summary report is delivered by BHPB. This would likely occur in early 2004.

Meeting with DIAND, David Livingstone

David discussed the outcome of a regional monitoring agency (RMA) working group meeting that occurred in October 2003. The group looked at two options:

1. One agency would include project-specific oversight responsibilities and regional monitoring and research responsibilities
 - New projects could be rolled in.
2. A separate regional research and monitoring agency would be created plus project specific agencies would continue to exist.

- The second model would accommodate the lack of desire of industry to fund broad regional research and monitoring which industry feels to be a responsibility of government.

BHPB proposed to dissolve the IEMA and substitute it by EMAB as the project specific monitoring agency.

Directors provided comments to DIAND regarding their preference of what elements should be included in a RMA. The following were agreed as three critical aspects to ensure independence:

- The IEMA Director appointment process is fundamental in creating an independent body
- The lack of ‘representativeness’ of Directors leads to greater independence
- Authority or ‘teeth’ is necessary for making the RMA credible.

David mentioned that he felt a WKSS type of research function is also critical to be included, and the RMA could incorporate projects from Nunavut. David also mentioned a long-term goal to create a NWT science centre in the form of an arms-length crown corporation. He felt that advocacy of the Aboriginal governments is key to perpetuate the desirable trait of independence within a RMA. DIAND will also make funds available for an Aboriginal caucus to meet and discuss the makeup of the RMA.

Meeting with RWED, Anne Gunn

Anne described the recent census of the Bathurst caribou herd and provided potential explanations for its apparent decline in numbers from approximately 400,000 animals a few years ago to 186,000 this past year. She felt it was important that BHPB be flexible with the timing of its monitoring work and conduct surveys when animals are present at the site, and not by prescribed calendar dates. She also felt it is key for BHPB to continue to monitor the behaviour of caribou, especially foraging time near the mine. This is critical to understand the consequences of BHPB’s potential contribution to cumulative effects.

Meeting#1 with BHPB, Chris Hanks and Jane Howe

BHPB delivered an update on activity at the mine. It is currently preparing a risk assessment on depositing wastewater from Fox Pit to the LLCF. It also mentioned that a revised *Wastewater and Processed Kimberlite Management Plan* would be submitted within three weeks, but that it was expected to change substantially once again in the near future. These changes will likely be submitted to the MVWLB in the summer of 2004, after a public process has been conducted to review options for the operational and long-term management of the LLCF. Directors commented that any new information could complicate the public hearings for the BHPB water licence renewal that BHPB expects to hold before June 2004.

BHPB mentioned that it has been pumping water over dyke D into cell E of the LLCF for over a month. This pumping will likely continue into December. The Directors asked if the volumes of this would be sufficient to cause flow out of Leslie Lake. BHPB

responded that it had done this in the past and created multiple ice lenses on Leslie Lake that did not extend to Moose Lake.

BHPB mentioned traditional knowledge work conducted in 2003 in order to gain insight on building an inuksuit fence to redirect caribou away from the mine. A report on 2002 TK work will be distributed to the Agency.

The Directors discussed their positive reaction to BHPB's invitation to the Agency participating in improving the 2004 BHPB environmental annual workshops. Carole was instructed to participate on behalf of the Agency in this initiative.

BHPB indicated that the revised five-year Panda diversion channel report, initially produced a year ago, should be delivered in November. It did not know whether fish samples were collected for mercury analysis, a commitment made earlier in the year, but will check on it. BHPB confirmed that they would not sit on the Steering Committee for the AEMP review project, but would provide the data required and access to RESCAN when needed for interpretation of data.

On the subject of the water licence renewal, BHPB and the Directors agreed that it is most likely that changes to effluent quality criteria would form the most substantive issue.

Action Item #2 – Staff create a comparison between N7L2-1616 and MV2002L2-0008 effluent criteria and LLFC outflow.

Follow up to meeting #1 with BHPB

Directors discussed the notification by BHPB of its intent to submit an interim *Wastewater and Processed Kimberlite Management Plan* in 2003, while a new plan containing potentially major changes is prepared for submission in mid-2004. They also discussed the BHPB notice that it is looking at increasing the final elevation and stacking of dry tailings. A consequence of this may be the avoidance of using cell D of the LLFC for deposit of tailings. This would be a significant operational change, and pose potentially serious reclamation issues related to erosion and water movement following closure.

Meeting with DIAND Inspector Darnell McCurdy

The Directors asked Darnell about ammonium nitrate contamination adjacent to the explosive storage building. He replied that the widening of the Fox haul road using blasted rock and the placement of a culvert over a wetland section could be the source.

Darnell mentioned that permafrost degradation around Misery is an issue requiring management action by BHPB. This degradation has occurred due to dewatering and overland flow of Misery Lake water into King Pond that melted some permafrost and mobilized organic material. As part of its *Abandonment and Reclamation Plan* BHPB is obligated to deal with permafrost degradation.

Directors asked Darnell to describe lessons learned related to the Fox Dewatering compliance issue and his advice to the regulators. He replied that:

- Definitions are not always clear, e.g. mine water vs. decant water, mining vs. site-preparation
- The hierarchy of legislation is not certain. For example, it is not clear if a letter from the MVLWB overrides the existing water licence or legislation.
- Regulators should ensure that the water licence is usable and clearly states that operations cannot begin until relevant management plans are approved.
- Prior to approval of revised plans, the company must operate with the last approved plan
- The MVLWB must operate within set time constraints such as the five-week review period suggested by IACT.

Darnell discussed the status of the Ekati landfarm, spills and the remnant of Fox Lake. He feels the current landfarm operated by BHPB is too small and is often filled with inappropriate material such as explosives. He mentioned that BHPB plans to construct a second lined and bermed landfarm for contaminated snow. Directors suggested the new landfarm to be covered and fenced to prevent wildlife access and BHPB should install a sump to aid in liquid removal. Darnell also felt there are too many spills at Ekati although the volume of individual spills is low and mainly occur in the pits. Darnell prefers a sump in all tank farms to remove rain and snow melt. He also observed that one half of the Fox Lake remnant must be dewatered because it rests against Fox Pit while the other half can act as a sump for mine water.

Meeting with MVLWB, Bob Wooley and Latisha Heilman

The topics planned for discussion were the Ekati water licence renewal, lessons learned from the Fox Lake dewatering issue and potential AEMP compatibility between Diavik and BHPB.

Latisha mentioned that BHPB is applying for an exemption so that its water licence renewal would not require an environmental impact assessment. This is largely related to the general view that there have not been major changes in the mine operation not covered in the original review of the project, other than recent changes to the interim *Abandonment and Reclamation Plan* and pit development scheduling. It was agreed that IEMA would be given a chance to review the exemption request.

Bob provided a copy of letters to BHPB and DIAND from the MVLWB explaining its interpretation of the Fox dewatering issue. The MVLWB feels that BHPB lacked authorization to discharge mine water to cell D of the LLCF. Based on the approval of a *Processed Kimberlite and Wastewater* management plan as required by the water licence, BHPB had authorization to discharge mine water to cell C only. Only in the absence of an approved management plan would the water licence amendment for Fox Pit form the authorization for BHPB to discharge to its choice of location within the LLCF. As the management plan was approved, BHPB was requested to comply with it. As BHPB is now in compliance with its management plan, having extended the discharge pipe from Cell D to Cell C, the MVLWB considers the issue to be resolved.

Directors asked for a description of the different processes used by MVLWB to review the AEMPs for Diavik and Ekati. Directors expressed their interest in harmonizing monitoring protocols between the two mines. Bob explained that Diavik has a technical advisory committee that makes recommendations to the Board. He has considered establishing a diamond technical advisory committee but there are concerns about representation and access to the Board.

Meeting with BHPB #2, Ian Goodwin, Chris Hanks and Jane Howe

Ian mentioned that Jim Excell is leaving the company at the end of the year and that Wayne Isaacs (a mining engineer from the U.S.A who previously worked at the Illawara underground coal mine in Australia) had been appointed as his replacement. Ian thanked Peter and Red for their contribution to BHPB as provided by their technical expertise and experience.

Directors asked BHPB about the support for the formation of a RMA. Directors mentioned that preservation of independent technical expertise is critical to their view of what a RMA should contain in its structure. BHPB mentioned that the plan is at an embryo stage and many of these details remain to be negotiated. Both Diavik and BHPB would preserve their current *Environmental Agreements* because they are important for the operations. BHPB also recognizes synergies to having a common look at the adjacent properties and for more direct community involvement. Bringing together two agencies could have the effect of increasing the technical resources available but how this will occur is unclear. Directors discussed the benefits of having a credible independent body to oversee a company, and the difference between consultant driven advice and that of an impartial permanent body.

Follow up to meetings - Regional Monitoring Agency (RMA)

Directors discussed important principles required in a RMA intended to provide independent technical advice and recommendations:

- Independence and non-representative behaviour of Directors is critical.
- It will be necessary to coordinate how a community forum and independent technical review complement each other within the RMA.
- Technical recommendations do not need to be adopted, but independent technical advice must be part of the public record and not be filtered through another body.

The Directors decided to make external efforts at reiterating the Agency position that an effective RMA must have independent technical advice that is effectively heard and understood by decision makers. One essential element of a technical component with the RMA is that it should remain independent and be based on a non-representative appointment principle, and being able to report findings publicly.

Appointment of IEMA Officers

Red recommended that Bill take over the position of the Agency chair.

Motion: Bill Ross be nominated for the position of Agency Chair.

Moved: Red Pedersen
Seconded: Peter McCart
Carried without Opposition

Bill stated his view that interactions between the Agency and Aboriginal Members need to be substantial. He is inclined to work with the staff more frequently to accomplish this.

Motion: Tim Byers be nominated for the position of Agency Vice-Chair
Moved: Red Pedersen
Seconded: Bill Ross
Carried without Opposition

Motion: François Messier be nominated as the Agency Secretary-Treasurer
Moved: Red Pedersen
Seconded: Tim Byers
Carried without Opposition

The Board supported Tim Byers having signing authority in Agency financial matters.

Follow up to the Agency Annual General Meeting

The Directors were impressed by the comments of the Aboriginal Members about the Agency, and the leadership positions within the communities of those who attended the AGM.

Schedule Planning and Next Meetings

37th Board meeting January 29th-February 1st, 2004

Summary Approved by:

-ORIGINAL SIGNED BY-

François Messier, Treasurer