

***Independent Environmental Monitoring Agency
44th Meeting of the Board of Directors
Yellowknife, NWT
March 15th – 18th, 2005
Summary of Discussion***

Revised: Apr. 26, 2005

Directors

Tim Byers	Jaida Ohokannoak
François Messier	Tony Pearse
Dave Osmond	Bill Ross

Staff

Sean Kollee
Kevin O'Reilly

Information updates

In addition to ongoing work related to review of BHPB reports and Agency internal communications including a conference call:

Bill met with BHPB (David Scott and Chris Hanks) to discuss Agency funding on March 14 and reported on the multi-project monitoring agency (MPEMA) financing meeting sponsored by DIAND.

Dave and Tim prepared presentations for the Ekati environment workshop.

Jaida met with Kevin and the bookkeeper to discuss developing a new coding system for better financial tracking.

François reviewed a report on regional caribou monitoring by Poole and Belanger.

Tony reported back to the Directors on the BHPP process of changing the management of the Long Lake Containment Facility (LLCF) and discussed the logistics for the internal workshop on the Agency annual report.

Kevin provided feedback on his first month as the Agency manager and mentioned that learning financial system of Agency has occupied much of his time.

Sean recently took a three-day statistics refresher course held in the Agency Boardroom with Barry Zadlick.

MEETINGS WITH OTHERS

GARTNER LEE LTD. (Eric Denholm and Steve Morrison)

Steve Morrison provided some introductory comments on how the MVLWB asked Gartner Lee to review the evidence and to assist with the licence renewal process by consulting with the parties as to their positions, issues and concerns. Gartner Lee prepared a series of questions to help better understand the issues and concerns of the Agency during the discussion. After all the stakeholder meetings are completed, a summary will be circulated. It was requested by the MVLWB that no new information be raised. The Directors had no concerns with the process.

Q – Detail was requested on Agency issues regarding approval of plans by the MVLWB and timelines for approvals.

A – The Directors considered this to be a low priority item in terms of the overall licence renewal process. There should be a hierarchy of approval processes where the level of review is tied to the importance or significance of the plan. The *A&R* plan should go through a rigorous review and the *Spill Contingency Plan* may not need such a rigorous review. The MVLWB commitment to host a public hearing on closure was cited as an example of appropriate rigorous review. The concept of an interim plan was discussed with the Agency often requesting greater detail than what has been presented by BHPB.

Q – The adaptive management approach to unregulated parameters contained in the draft licence was not supported by the Agency. Is the adaptive management concept approach objectionable or are there specific concerns?

A – The Agency clearly indicated its very strong belief in and support for adaptive environmental management for the mine as this is a cornerstone principle of the Environmental Agreement. There was agreement among the Directors that the approach detailed in the draft licence is an inappropriate technique of applying adaptive management to the unregulated parameters. Discussion of this approach has not occurred among stakeholders.

Q – On the topic of effluent discharge criteria the Agency recommended that criteria should not necessarily remain as in the 1616 licence. Can the Agency provide further detail on a model based on receiving environment capacity particularly for cadmium and arsenic?

A – The Agency's highest priority in the water licence is the protection of receiving environment and this is what should be guiding any effluent limits. The Agency provided advice at the hearing that adequate protection of receiving environment should guide the effluent criteria such as use of CCME guidelines at some point in the receiving environment. This could help the MVLWB develop licence terms. The term 'receiving environment' should be defined in the licence and the in CCME guidelines may provide some assistance. CCME guidelines are conservative so could allow the receiving environment to be set farther downstream and Moose Lake was put forth by Agency as a suggested location. It is really up the Board to set the definitions and the discharge point,

but also to provide a rationale for the same. At the discharge point, there should be no acute toxicity for aquatic life and no chronic effects at some defined point farther downstream. Consideration of Leslie Lake as 'receiving environment' is also a widely held view. The Agency also recognizes BHPB's concern that snow ploughing should not be considered a discharge to the receiving environment.

Q – Detail was requested on the Agency recommendation that the licence term coincide with expiry of the Sable, Pigeon and Beartooth licence.

A – The Directors are of the view that the two licences should be brought together at some point, better sooner than later. The expiry of the expansion licence provides an opportunity for this to happen. The Agency has heard from our Aboriginal society members that two separate licences create an additional burden and, for effective management of the environment, one project should have the same effluent criteria and a single water licence.

Q – Detail was requested on wording around prevention or containment of seepage with a view to the Agency recommendation to use 'prevent' or 'contain' instead of 'minimize'.

A – The Directors replied that seepage from a waste rock pile is not possible to avoid but it can be contained. It is necessary to provide some flexibility to an operator. This was not a significant issue for the Agency.

The Directors were invited to comment on other issues of importance to the Agency not discussed during the question and answer session. The Directors mentioned that they remain supportive of their three earlier letters on the water licence submitted to the MVLWB and that adequate protection of the receiving environment through appropriate effluent criteria is the key Agency concern. The two licences should be harmonized or brought together. The Directors also believe that the water licence ought to impose a requirement for an annual and collaborative environmental workshop for the purpose of enabling adaptive environmental management. There was also support for the incorporation of the precautionary principle into the licence, as raised in previous submissions. It was suggested that Gartner Lee should carefully examine the transcripts of the public hearing, particularly the Agency position and statements with regard to protection of aquatic life in the receiving environment. General comments were also offered on the MVLWB's management of the water licencing process. The Directors also noted that BHPB had its project approved based on no measurable change to Slipper Lake. This original objective for the project should be reflected in any new licence and reinforces the case for effluent discharge criteria that protect the receiving environment.

RWED (Dean Cluff and Raymond Bourget)

Dean reviewed the split of RWED into two new departments, Environment and Natural Resources (ENR), and Industry, Tourism and Investment (ITI) as of April 1st, 2005. Bob Bailey will be the acting Deputy Minister on the ENR side, and Peter Vician and Doug Doan will be with ITI.

Raymond noted that it has been a quiet year for hunting on the winter road as caribou are over wintering about 20 km north of Yellowknife rather than near the road.

The Directors asked if they were aware of the source of the wolverine problems over the last winter at Ekati. The RWED representatives replied that there seems to be a considerably higher density of wolverine than what had been predicted or expected. In 1999 RWED assisted with problem wolverine and then again in 2001 and now in 2004-5. There may be a three-year cycle in the population. Diavik has shared incidental wildlife observations with RWED that have been helpful in understanding general trends. BHPB does not make similar efforts. Earlier and regular reporting would be much more helpful for RWED and the mines to manage human activities in relation to wolverine.

BHPB staff characterizes interactions with wolverine as threatening due to the reputation of wolverines but this is incorrect. Wolverines are currently staying around the Misery camp, three in total. Skirting at the main camp accommodation building is not adequate, but a commitment was made to fix it this summer (after six years). At Misery camp, the buildings were skirted but not properly. The camp buildings may also offer some shelter through snowdrifts that may attract wolverine.

The only known food habituation was to the water supply under a building that could include some grey water and possibly to the dead wolverine carcass found at Misery camp. There is a need for a stronger initial deterrence with wolverine and for regular patrols when problem animals are encountered. This is not a situation unique to BHPB as it happens with outfitter camps too. It is very time-consuming and expensive for RWED staff to continue to deal with the problems and their preference is that better preventative actions be taken. There is a case for better training for key staff at Ekati to ensure prevention through stronger and more consistent initial deterrence, proper building skirting, removal of excess snow around building, patrols when problem animals are encountered and other measures. It may also be possible to insert terms and conditions into land use permits on building skirting that would then be enforceable and open to inspection.

BHPB (Chris Hanks and Jane Howe)

Chris delivered an Ekati update. The company is currently:

- Testing a processing plant method to reduce the amount of fines being pumped to the LLCF.
- Using some coarse rejects as aggregate for shot-crete for the underground operations. This may reduce the heavy metals input.
- Working on Panda underground. The raise was completed on February 28th, 2005.
- Developing a drift to Koala North underground and encountering salty water. Rescan is studying the issue as the water is about one-third the salinity of seawater and may have to be deposited in Long Lake.

- Looking into heat recovery from generators to help heat underground operations.
- Constructing the underground conveyer that is due in April for completion and December for total commissioning. Trucks will be used in the meantime.
- Cleaning up after a 25000-litre diesel spill that was fully captured in berms. Valve failures occurred in sequence. The inspector was on site at the time and witnessed the response plan in action.
- Dealing with problem wolverine. A wolverine was shot March 7th. Misery camp is sheathed with metal wire. However problems continue as do winter road camp problems. May be due to reduced trapping of wolverine by Inuit. BHPB committed to check to see what the attractants may be for wolverine and to pass this information along to the Agency.
- Planning to host the Agency annual site visit June 10th – 12th.
- Distributing the 2004 landfarm and contaminated snow facility reports.
- No delivery date yet on the WEMP results for 2004
- Waiting for Diavik's review of its WEMP so there will be no changes to the caribou monitoring programs for 2005.
- Reviewing a proposal for wolverine monitoring from RWED.
- Looking at issues surrounding pit water management and waste rock piles. Unclear what a temporary closure entails or the jurisdiction of the MVLWB, DIAND is primarily the lead through the inspector. Looking at three options for the Misery pit; continuous pumping, occasional pumping, and natural filling. A 5 m clean granite cap is being considered for the Misery waste rock pile.
- Snow clearing allow for some light penetration at Cujo Lake that allowed photosynthesis and oxygen production naturally. Mechanical aerating was used later to increase oxygen levels.
- Rescan has now compiled the data to go into an air quality model. This will be circulated for a two-week comment period. Snow sampling to be completed in April. There is no intent to postpone this for another year.

Directors mentioned the importance of snow and vegetation survey to the Aboriginal society members, especially related to dust and air emissions. BHPB replied that Rescan has been very busy and the snow survey was delayed last year so it must go forward this year. The CALPUFF model will likely be selected.

- Looking into under ice water chemistry changes in the LLCF. An unregulated water quality parameter update report will not be available until summer as a full year of data are required to understand possible inputs, groundwater, and recycling. The different kimberlite composition from Koala and Misery, compared to Panda, may also be a factor.
- Distributing the MAA matrix shortly to allow individuals to manipulate the numbers and provide further comment. Robertson and Haley are looking into feasibility designs and looking into a new management plan for submission to the MVLWB in June. A plan for roads up the west side of cell B may be submitted to the DIAND inspector for approval to allow earlier construction.

A Director asked about the absence of arsenic results in the 2003 AEMP and BHPB committed to find out why and pass this along to the Agency. Directors mentioned that fairly detailed closure information is expected as part of the new Wastewater and Processed Kimberlite Management Plan (WWPKMP) submission. BHPB replied that the WWPKMP is not a closure plan, the A&R plan to come will carry on that discussion. BHPB does not currently have the exact plan for use of rock and vegetation to close the LLCF.

Directors asked BHPB for its view on the process for changes to monitoring programs. BHPB replied that as an example the AEMP refinement process led to multiple changes. BHPB believes that changes are not necessary so an annual review of monitoring programs each year is not necessary. The AEMP is operating as part of a five-year program. The three-year environmental impact report may also lead to changes.

Directors commented that Dogrib elders want to go monitor the caribou at their discretion not on a rigid schedule. BHPB replied that Inuit and Lutsel K'e community members were the only ones that took BHPB up on its offer last year. BHPB would be delighted to host Dogrib elders but Dogrib leadership would not have it happen. Design of Inuksuit fence was an example of TK input from the Inuit. BHPB will send out a report on this (Vivian Bianci) when it is complete and KIA consents.

BHPB commented that the Panda-Koala waste rock pile likely to close in 18 months. BHPB plans to retain maximum circulation of air in the pile and cap the top to be as impermeable as possible. A small portion of the pile would remain open to accept waste rock from the underground mines. Directors noted that whatever shape of the pile at the end of mining will remain permanently. The shaping of the pile as mining finishes requires considerable foresight and leaving it at the angle of repose as a long term feature is problematic. BHPB replied that side slopes would remain, as they are to retain void space and air circulation in the sides of the pile. The top would be graded level with a slight doming and compaction to inhibit water infiltration. Ramp details yet to be determined. By summer 2005 it may be reasonable to have a discussion on this and BHPB has hired an engineer to work on this project.

Two Agency Directors, Bill and Tim, then met separately with the BHPB representatives to further discuss the Agency submission for a two-year core budget and work plan. They reported that BHPB would be sending a letter signed by the CEO that requests a formal mediation process under the Environmental Agreement. With respect to the funding request for an additional \$30k in the fourth quarter of 2004-5, BHPB is of the view it is not appropriate to fund activities outside of an approved work plan and therefore the request is denied. If documentation is provided that the Agency overspent by up to 5% of the work plan on approved budgetary items the funding would be forthcoming. BHPB will provide a quarterly payment equivalent to that of last year until the 2005-6 budget is resolved. The Directors are of the view that any activity within the Agency mandate is a legitimate expense, even if it is not in an approved budget unless the Agency Society determines otherwise. The company view is that an activity must be in

the work plan, inherently limiting flexibility for the Agency to adapt to new company initiatives or changes to mine plans or environmental management.

INTERNAL DISCUSSIONS

Follow up to Agency hosted Ekati environmental workshop

The Directors commented on the valuable information received this year particularly regarding caribou monitoring. They decided to draft a letter to BHPB, DIAND and the governments of the NWT and Nunavut (copied to Agency members) including the following main comments:

- Need for enhanced vegetation monitoring, both regional and site specific
- Wolverine DNA monitoring – tacit support from some Aboriginal members, strong support from RWED
- Lateness of BHPB monitoring program reports
- Community monitoring of caribou – demand for caribou studies over and above aerial surveys and action on fixing the perceived problems
- Improved monitoring of dust and other airborne pollutants around the LLCF
- Involvement of the Nunavut Government in caribou monitoring and leadership in policy development

Other comments heard at the workshop related to resident and non-resident hunting quotas, caribou reproductive rates and a potential water licence requirement for snowmelt monitoring.

Action Item #1 – Staff draft outline of environmental workshop follow up letter and submit to Directors for review.

Agency Cooperation with the Snap Lake Environmental Monitoring Agency (SLEMA)
The Directors agreed that it is the position of the Agency that we will cooperate in all reasonable ways with other monitoring agencies and this includes SLEMA.

LLCF Multiple Accounts Analysis Process (MAA)

The Directors discussed the outcome of the process to contribute to developing a consensus view on how the LLCF should be managed by BHPB to improve its operational efficiency. The Directors viewed it as a high quality consultation process and noted that it resulted in the identification of a preferred option from those options presented by BHPB. The Directors discussed the level of detail that should be included in the next *Wastewater and Processed Kimberlite Management Plan (WWPKMP)* and concluded that there should be enough detail to show that closure is technically feasible.

Letter to GNWT-RWED

The Directors decided to write a letter to encourage RWED in finding a caribou biologist replacement for Anne Gunn upon her retirement, and thanking RWED for its work so far in monitoring the Bathurst herd. The Directors agreed that Anne's work has been

instrumental to contributing to RWED's role in effective environmental management of Ekati and regional monitoring of caribou.

Action Item #2 – Tony draft letter to RWED thanking Anne Gunn and requesting an expeditious yet thorough effort to recruit a new caribou biologist.

FINANCE and ADMINISTRATION

Accounting Software

Kevin related a meeting that had been held with the bookkeepers on improved accounting and new software was recommended. Directors supported changing to the software for the coming fiscal year and for Kevin to agree to an acceptable price for the service for the duration of the new Agency workplan and core budget (2 yrs). A new coding system would be part of this improvement. Kevin will also consult with the Agency's accountants in developing the new coding system.

Agency credit card

Kevin requested that the Agency receive a credit card to ensure that items such as plane tickets and hotels can be purchased more conveniently without requiring the use of the personal credit cards of Agency staff. Directors requested that the Agency accountant be contacted to ensure this is an acceptable practice based on the Agency bylaws, and if so, authority to proceed was provided. All credit card statements will be reviewed and approved, with supporting receipts, by at least one Director with signing authority.

Moved by Dave Osmond, Seconded by Tim Byers.

That the Secretary-Treasurer and staff are authorized to obtain a corporate credit card for the Agency with a limit of \$10,000 as long as the Accountant is of the view that this is permitted under the Agency By-laws.

Passed Unanimously

Moved by Dave Osmond, Seconded by Tim Byers.

That the Secretary-Treasurer and staff are authorized to negotiate a new accounting system with the current service provider with direction to secure a two-year term for the offer, and a lower price if possible.

Passed Unanimously

Agency Annual Report development process

Kevin presented a schedule from the publisher to produce the annual report in June 2005 rather than September 2005. The Directors noted the tight timeline would be more difficult to meet than in past years.

Next Meeting
April 11th – 13th, 2005.

Meeting Adjourned.

Summary of Discussion Approved by:

-ORIGINAL SIGNED BY-

Jaida Ohokannoak, Secretary Treasurer