

Independent Environmental Monitoring Agency
38th Meeting of the Board of Directors
Yellowknife, Northwest Territories
March 14th – 19th, 2004
Summary of Discussion

Revised: June 7th, 2004

Directors

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

Guests

Darnell McCurdy (DIAND)
Ian Goodwin / Chris Hanks / Jane Howe
(BHPB)

Staff

Carole Mills Sean Kollee

Bob Wooley / Sarah Baines / Latisha
Heilman (MVLWB)
John McCullum (EMAB)

The 38th meeting was called to order by the chairperson at 9:00 am on Monday March 15th, 2004. The agenda was reviewed and accepted. Prior to the Board meeting one full day was spent preparing the Agency presentations for the Ekati environmental workshops.

Information Updates

Bill responded positively to the request of the Diavik Environmental Monitoring Advisory Board (EMAB) request to have a workshop on cumulative effects. He met with Jane Howe (BHPB) in Calgary and discussed IEMA-BHPB working relations.

Tim met in Lutsel K'e on the subject of Environmental Agreements and the potential for the creation of a single regional monitoring agency (RMA). Attending the meeting were the new members of the Wildlife, Land & Environment Committee, Chief Archie Catholique and interested members of the community. He also noted that the Final Hearing Report from the Nunavut Impact Review Board on the Jericho mine project is out and may contain interesting information on cumulative effects.

François responded to a request from BHPB about traffic monitoring protocol and the use of an infrared beam to count vehicle numbers on the haul roads. He mentioned the importance of retrieving data daily, not less frequently or cumulatively.

Dave met with NSMA and reviewed the *AEMP* for the upcoming Ekati environmental workshops.

Carole mentioned that the Aboriginal Caucus report on environmental monitoring of diamond mines has been distributed broadly.

Meeting with the MVLWB (Bob Wooley, Sarah Baines and Latisha Heilman)

Ekati Environmental Workshops

The events leading to the withdrawal of Mackenzie Valley Land and Water Board (MVLWB) from co-hosting the Ekati environmental workshops were discussed. It was noted that the MVLWB received legal advice that engaging in public discussion of an application before the board should be reconsidered. The rationale for considering the review of monitoring programs as an activity related to the licence application was questioned. The Directors noted that MVLWB staff had attended Ekati environmental workshops in previous years where monitoring programs were reviewed. Bob replied that it was an issue of optics more than strictly legal constraints. He noted that although MVLWB would not co-host the workshop staff would attend.

A brief history of the workshops was provided. In 1997 the Agency felt a stakeholder meeting would be helpful to improve the monitoring programs and recommended this to BHPB. BHPB agreed, with the result that such meetings have continued annually until now. The purpose has been to review the findings of the previous year and suggested changes. It has included the full slate of stakeholders. The Agency has observed that these annual workshops are effective tools for adaptive environmental management at the site. The Directors feel the biggest loss of the workshop cancellation was the opportunity for stakeholders to discuss Ekati's programs as a group, and reach consensus on changes. BHPB's suggestion to host workshops in the communities will not provide such a forum, without regulators or Agency representatives in attendance. The Agency responded to BHPB that the workshops were too important to lose and the Agency would host them. The Directors strongly believe that conducting such a workshop is well within the Agency mandate under the *Environmental Agreement*.

Licence Renewal Application

Latisha stated that the MVLWB would like comments on the clauses of the licence so that BHPB can be informed before the public hearing, and so that Board can determine if a pre-hearing is necessary. Bob mentioned that some clauses of the licence could be drafted prior to the public hearing.

Meeting with EMAB (John McCullum)

John updated the Agency regarding a number of topics including:

- EMAB's role in the Diavik water licence amendment process regarding the ammonia effluent discharge criteria
- A MVLWB review of the Diavik AEMP by the MVLWB
- Development of an EMAB TK panel and TOR for a science panel
- The EMAB discussion of a workshop on cumulative effects on wildlife

The work by Johnson and Boyce (University of B.C.) was highlighted as findings that there might be cumulative effects on caribou at a scale exceeding the Ekati claim block. The Agency will request reports of recent research from RWED and DIAND on cumulative effects on caribou. It was agreed that a funding partnership would have to be developed among all stakeholders to host a workshop on cumulative impacts and that

IEMA and EMAB could send a joint letter to likely participants. A tentative date would be late winter 2004.

Action Item #1 – Staff request the draft Bathurst Caribou Management Plan from RWED and the principles or components of a cumulative effects assessment on caribou, from DIAND's CEAMF program.

Action Item #2 – Staff prepare an update on Agency operations for the upcoming EMAB board meeting. Bill to discuss the workshop and the contents of a draft letter with Bob Turner (EMAB Chairperson) further.
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Meeting with Darnell McCurdy – DIAND

Darnell discussed the items requiring immediate attention by BHPB from his winter inspections. In January 2004, he had some key concerns that needed to be addressed such as:

- Drip Pans – used for light plants around the site; many were leaking fuel. BHPB did not carry through with planned upgrades to contain the spills as it committed to do last winter. BHPB has since welded a drip pan underneath each unit that can accommodate a spill pad.
- Land farm – Darnell found BHPB dumping inappropriate material into the land farm. BHPB has suggested a separate land farm for contaminated snow only. Liquids from this landfarm will be pumped to an area in the waste rock pile called the 'racetrack' after passing through an oil-water separator. It will be gated and locked to prevent truck access so it will be more difficult to deposit inappropriate material. A manifest describing the types, volumes and locations of contaminants will have to be completed. The land farm will be used for contaminated soils; the sump will remain and be pumped out. Waterfowl barriers and deterrents will be put in place in the snow farm and land farm.
- Culvert at km 7 of the Misery road – To date the culvert has not been installed. Future approvals will include a time limit.
- Rock crusher placement - A replacement rock crusher was put in place without the proper lined and bermed pad. The new unit is largely electric powered so BHPB will have to install a drip pan beneath the few hydraulic pumps.
- Re-fuelling – spills have been occurring largely due to lack of attention at the pump. BHPB is supposed to install an improved aerator to prevent spills.

Darnell mentioned that although he had grown frustrated with BHPB's rate of response to his previous inspections, the company had addressed his concerns by the time of his February inspection.

Darnell confirmed that sampling from SNP station 1616-30 (outlet of LLCF) occurs at the end of pipe and no lake water is sampled. This will be changed to take samples above the pipeline in cell E of the LLCF. He also confirmed that he is responsible for checking that the company samples at the required intensity.

Ekati Water Licence Renewal

Darnell mentioned he would be delivering a submission to the MVLWB. For him, the key concern for the new licence is that the MVLWB does not reduce the ability of the inspector to do the job. He also supports strengthening the definitions section and removing ambiguous words such as ‘prevent’ and ‘minimize’.

Ekati Environmental Workshops

Darnell interpreted the invitation to the Ekati workshops to be that the Agency and MVLWB would be hosting the event regardless of the opposition from BHPB. He concluded that hosting an Ekati environmental workshop is within the mandate of the Agency but not required in the *EA*, nor is company acceptance of recommendations that come out of a workshop. He felt that the workshops were productive and very balanced.

The Directors asked Darnell if it would be difficult to track wastes in the landfills and to salvage materials for the communities. Darnell felt salvage would be possible but complicated by liability issues. Often the materials going to the landfill are in such a state that the salvage value is limited.

Aboriginal Caucus report on Environmental Monitoring of Diamond Mines

Darnell asked if the Directors support the principles outlined in a report from the Aboriginal Caucus. He felt some of the principles of the report were not workable. The Directors responded that the Agency has a responsibility to convey the views of its aboriginal members to BHPB and government. The final report contains Aboriginal Caucus views, some of which the Agency supports. The report was made public according to the Agency communications policy.

Directors mentioned their appreciation for Darnell’s work and his competency with the responsibilities of the job.

Meeting with BHPB (Ian Goodwin, Chris Hanks, Jane Howe)

Jane provided an update on Ekati operations. BHPB agreed to provide a copy of the plans for the new snow farm. BHPB mentioned it would be replacing the departing BHPB employee (Allison Armstrong) with someone with a background in biology to be responsible for *WEMP* and *AEMP*.

Water Licence Renewal

BHPB mentioned that its March 24th, 2004 submission to the MVLWB on its water licence application would suggest retaining inspector authority, identify terms that require clarification, and comment on analytical methods.

Revised management plans

On the topic of outstanding management plans that may be approved prior to the public hearing of the water licence renewal, the Directors mentioned it is unlikely the revised *A&R* plan could be approved so the hearing might have to be based on the currently approved plan. BHPB agreed this is an issue, but it would prefer to have the revised *WWPKM plan* in place for the hearing because the ore throughput is higher and is more

in line with what BHPB is applying for. BHPB also noted that an interim approval for central dewatering system is required before freshet as part of the *WWPKM plan*.

Reports Coming Soon from BHPB

- Annual water licence and *EA* annual report
- Chloride ecological risk assessment
- Nitrate toxicity study
- Revised *spill contingency* plan
- Revised *A&R* plan and updated liability estimates

Ekati Environmental Workshops

BHPB mentioned that, although not presenting anything at the Workshop, it attended out of self-defence to correct any possible misinformation and to ensure the water licence renewal application was not discussed. Generally, BHPB felt that the presentations made by the Agency were well balanced. The Directors felt it was an odd situation to be presenting 2003 results on behalf of BHPB. Following the workshop the Aboriginal members gave clear guidance that they would prefer to have BHPB to do the presentations as it is the company's responsibility to report on their programs. This would provide the Agency with an opportunity to play its proper role of assessing BHPB's programs. Another weakness was not having BHPB's consultants present to answer questions.

BHPB replied that it has an obligation to consult, and has room under the *EA* as to how it consults. It chose not to do the workshops and to concentrate on going into the communities instead. Directors suggested that if BHPB reinstated the workshop then the Agency could present its analysis of the programs as well.

BHPB asked if all Dogrib communities were invited to the workshops. Carole responded that the Dogrib Treaty 11 office, as requested by the Dogrib government, processed the invitations.

The Directors highlighted some key concerns of the Aboriginal participants at the workshops. These were:

- Increasing traditional knowledge input into monitoring programs
- Landfills and the materials put in them. One community member asked for a report on how BHPB has improved their waste disposal procedures and how it allows reuse of materials in the communities
- Impacts on water, fish, wildlife and human health
- The importance of development of reclamation criteria

The Directors mentioned support for the Canadian Wildlife Service recommendation on reducing the bird survey to every two years from every year.

The Directors indicated they would distribute a workshop summary to BHPB and to all participants of the workshops.

Action Item #3 – Staff draft and distribute a copy of the key outcomes of the Ekati environmental workshops.

Agency Financial Year 2004-05 and Agency Mandate

BHPB confirmed that the Agency would receive a sum of \$531,000 for 2004-2005 divided into quarterly instalments but that, in future, funding reductions should be anticipated. BHPB also stated that they do not believe that the Agency should engage in funding:

- Aboriginal Caucus events
- Environmental workshops, and;
- Cumulative effects assessments of diamond mines on wildlife related activities.

Directors replied that they are comfortable that all their work falls within the mandate of the Agency as described in the *Environmental Agreement*. They confirmed that it is only reasonable to expect that our workplan would change modestly from the one forecast two years ago.

The Directors informed BHPB that the Agency facilitated the Aboriginal Caucus workshop to gain Aboriginal views on monitoring at Ekati, and that the workshop was triggered by BHPB's request to invoke the Regional Monitoring Agency transitional clause in the *EA*. The workshop was funded by DIAND with a small contribution of Agency staff time. BHPB replied that it would not comment on the Aboriginal Caucus report, and asked if the Agency subscribes to the views of the caucus. Directors responded that the Agency views on Aboriginal Caucus report have not yet been fully formulated.

Directors indicated to BHPB that they would consider impacts originating within the Ekati claim block and contributing cumulatively to wildlife impacts, as part of the Agency's mandate.

Action Item #4 – Deliver an Agency budget breakdown by quarters to BHPB.

BHPB-Agency working relationship

The recent strained relationship between BHPB and the Agency was discussed in detail. Suggestions were made on how to improve this and include:

- Development of a communication procedure between BHPB and the Agency
- More frequent contact between BHPB's Manager and the Agency Chair
- More frequent contact between the Agency and BHPB environment staff
- BHPB resolve outstanding issues by contacting the Chair rather than staff

BHPB mentioned that the environment department is finding it particularly difficult to work under financial restraint. BHPB is trying to ensure core monitoring is done and respond to developing issues (such as nitrate toxicity) where BHPB is involved in original research that is not normally required by a company. This has contributed to a general negative ambiance in the working relationship. BHPB requested more time at future Agency Board Meetings. The Directors agreed to this.

Action Item #5 – The Chair to contact BHPB's Manager in April to discuss improvements in Agency-BHPB communications.

Air Quality Monitoring Program (AQMP)

BHPB indicated it is developing an improved AQMP model in consultation with EC and RWED. The Directors responded that they would appreciate an opportunity to review the model. The Agency recommended in 2002-2003 that more sampling locations be developed to capture the dust plume better. This was to be done in April 2004 by BHPB. The Directors advised BHPB that implementing the previous program again in 2004 would not be viewed positively by the Agency and BHPB may consider delaying snow sampling into 2005 to ensure sampling locations are improved. BHPB agreed that was reasonable, but it would have to send a letter to EC and RWED on this issue. The Directors and BHPB supported monitoring of vegetation this summer. A suggestion from the Ekati environmental workshops was to locate vegetation-sampling plots near cell B of the LLCF to determine if dust from the exposed processed kimberlite is uploading metals into natural vegetation. BHPB agreed this could be beneficial.

Action Item #6 – Directors to review the updated Ekati air quality model.

Comments Related to the Ekati Environmental Reports

Directors mentioned the BHPB monitoring program reports were of high quality. The Agency noted the lack of fish recruitment in cell E and suggested BHPB might look further into this issue. BHPB replied that this is likely an artefact of the methodology because the approach taken by the study was to catch larger fish. Other comments of the Directors on BHPB's 2003 reports include locating the source of molybdenum in waters downstream of the LLCF, and estimating the downstream effect of arsenic and cadmium exceeding CCME criteria at the LLCF outlet towards the end of the mine life. The Directors felt BHPB could do this quickly by using dilution calculations. The Agency will be requesting that the *WWPKMP* addresses the impacts of discharge levels on the receiving environment.

Directors mentioned that the ecological risk assessment for exposure to processed kimberlite by wildlife requires re-working. BHPB agreed to look into this.

Action Item #7 – Draft a letter to BHPB noting that the report titled '*Assessment of the potential for effects on wildlife from exposure to processed kimberlite at the Ekati Diamond Mine*' is not usable in its current form and request BHPB re-do much of the project.

Wolverine Monitoring

BHPB mentioned that it is discussing with RWED if Rescan (BHPB's new wildlife consultant) should try to complete the 50 wolverine transects used by Golder in 2003. BHPB may re-evaluate the program for 2005. The Directors mentioned that the Agency position is that wolverine monitoring is important and needs improvement. DNA

sampling is likely the best way to accomplish this. If BHPB uses a transect sampling program, it is important to compare results between years.

Caribou Monitoring

BHPB replied that Rescan was asked to bring in an independent group of consultants to improve how the mine deals with caribou, and that the Agency would be invited to meet the new wildlife consultants this summer. The Directors raised the issue of cumulative effects on caribou. Ekati may have effects on caribou beyond where BHPB is now measuring it even though the analysis on the claim block appears sound. Such effects are suggested by a recent study by Johnson and Boyce (Univ. of N.B.C.). BHPB replied that it contributes its site-specific information only and that is the extent of its ability.

Other Issues

The dates of the annual Agency site visit were discussed. May 28th (1st choice) or June 4th (2nd choice) was suggested as departure dates to Ekati, returning on May 31st or June 7th, respectively.

For Peter McCart's replacement, BHPB mentioned it would prefer skills in mine closure while DIAND may request an individual with aquatic expertise.

BHPB may be changing the laboratory that processes its water samples. The Directors requested that detection limits remain constant.

Agency Water Licence Renewal Submission

The Directors developed the content of the letter to send to the MVLWB regarding BHPB's water licence renewal application and how best to consult with Agency Aboriginal Members. (Note – Agency submission was distributed March 24th, 2004 and is available at www.monitoringagency.net)

Finance and Administration

As of March 1st, 2004, approximately 75% of the Agency annual budget was spent. The remaining totals at the end of March were considered when factoring in the costs of the environmental workshops. Directors noted that the Agency would have to cover some increased costs for the workshop now that the MVLWB is no longer co-hosting it.

Francois approved the expenditure for the purchase of a new projector to replace the broken unit.

Honoraria Policy

The Directors reviewed the community consultation procedures and honoraria rates and changes to the policy where approved.

Seepage Review Contract

Directors supported an expert review of the 2003 *Waste Rock Seepage* report. Tony agreed to develop a ToR with the consultant and the Board supported an expenditure of up to five thousand dollars for this initiative.

Action Item #8 – Tony to develop a ToR for review of the 2003 Ekati <i>Waste Rock Seepage</i> Report for Bill Price (NRCAN).
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Annual Report Planning Meeting

An internal Agency meeting April 16th and 17th, 2004 was agreed to by the Directors.

Summary of Discussion Approved by:

-ORIGINAL SIGNED BY-

François Messier, Secretary-Treasurer.