

***Independent Environmental Monitoring Agency
59th Meeting of the Board of Directors
Yellowknife, NWT
March 4th – 5th, 2008
Summary of Discussion***

Revised: March 13, 2008

Directors

Tim Byers

Sheryl Grieve (first ½ day only)

Laura Johnston

Jaida Ohokannoak

Bill Ross (second day only)

Tony Pearse (via teleconference)

Staff

Sean Kollee

Kevin O'Reilly

REVIEW OF AGENDA

The agenda was modified to discuss the Agency annual report earlier in the day so Sheryl could participate in person.

Two new reports were added to the agenda – (Ekati Wildlife and Human Health Risk Assessment Final Report, and Revegetation Research Projects 2006 and 2007)

INFORMATION UPDATES

In addition to regular review of Agency internal correspondence:

Bill – mediation negotiations and adaptive management workshop.

Tim – adaptive management workshop and planning trip to Lutsel K'e.

Jaida – teleconference on the mediation, review of finances, workplan and budget with Kevin.

Laura – some review of BHPB's proposed change to the Sable, Pigeon, Beartooth water licence. She also reported her reappointment to the NWT Water Board.

Kevin – updated finances and workplan/budget for the next two years. Also listed outgoing correspondence and other activities. He secured additional information regarding an unsolicited proposal for remote sensing and vegetation change.

Sean – reviewed logistics for the annual report writing meeting.

AGENCY BUSINESS

AGENCY ANNUAL REPORT

The Directors discussed the logistics for the report writing workshop and draft production timeline that was provided by Outcrop. Cost options include use of full colour for the technical version and the use of recycled paper. It was decided that the Agency did not require a full colour technical version of the Annual Report, but both versions should be printed on recycled paper. The addition of a new section including photographs and a brief biography of the Directors was agreed upon. Other new features might include 'highlights' at the beginning of each technical chapter.

ADAPTIVE MANAGEMENT WORKSHOP

The Adaptive Management (AM) workshop took place at the Explorer Hotel in early February. It was a good introduction into the formal process and definitions of AM. It was widely understood that "proper" AM is a more rigorous process than usually believed. AM planning is different at the EIS stage vs. the operating stage. A case study at the workshop would have been more useful to show application of AM in a project context and the use of AM to manage it. One message supported by the Agency was the need for collaborative reviews of monitoring programs that inform the adaptive management system. The BHPB representative at the workshop was reluctant to discuss any aspect of the Watershed Adaptive Management Plan or aspects of adaptive management at Ekati.

Adaptive management plans (AMP) under WLWB review for Ekati and for Diavik – Kevin and John have discussed coordination of the Agency and EMAB review of the management plans, perhaps involving the use of a joint consultant.

Action Item #1 – The Manager is to continue discussions with EMAB on a collaborative review of the two diamond mine adaptive management plans.
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ENVIRONMENTAL AGREEMENT IMPLEMENTATION MEETING

Bill discussed the recent meeting held to discuss the *Environmental Agreement* implementation. No major decisions were made at the meeting and the separate fund dispute was not discussed. Bill Ross, Tim Byers, Kevin O'Reilly, Eric Denholm, Laura Tyler, David Livingstone, Lionel Marcinkoski, Gavin More and Chandra Venables attended. It was suggested to the Agency that future recommendations regarding wildlife should also be directed to Wek'eezhii Renewable Resources Board. It was also mentioned that the Chamber of Mines project on assembling caribou data is on hold as Diavik has declined to participate. BHPB appears pleased with WLWB and timeliness of its decisions so far and has mentioned this to Neil McCrank, who is conducting a regulatory review for the Minister of the Indian Affairs and Northern Development. Gavin is interested in simplifying BHPB's reporting with less emphasis on data and more on trends and analysis. He is prepared to meet with BHPB to discuss opportunities to

pursue this initiative. The next meeting is on June 2nd and Kevin will circulate notes to those in attendance, to be approved during the next meeting.

MEDIATION UPDATE

The Directors were advised that BHPB had accepted the Agency's suggested amendments to the proposed Resolution Agreement on the Separate Fund mediation. The Directors agreed to the Agency's signing of the document. The agreement was signed at the meeting and sent to BHPB.

FINANCE and ADMINISTRATION

Kevin provided a copy of a variance report on expenditures to the end of the current year plus a new draft workplan and budget for the following two years. This was discussed and modified by the Directors.

Action Item #2 – Kevin to make the agreed upon changes to the 2008-10 Agency budgets and work plans.

Motion – for approval of the 2008-09 to 2009-10 Agency work plan and budget as amended.

Moved by – Tim Byers

Seconded – Laura Johnston

Carried (Tony Pearse concurred later via teleconference)

Strategic planning – The Directors considered the need for an outside evaluation of the agency such as the Macleod Institute report that was completed in 2000. There was general agreement to delay the work for one year but to begin planning it in September 2008 with an eye to any further progress on MPEMA and to investigate funding options at that point.

MEETINGS WITH OTHERS

MEETING WTH GNWT (Jan Adamczewski)

Tim informed Jan that the Directors had received a summary of the February 2008 Caribou and Cumulative Effects workshop from Kim and would be interested in hearing his views on how it went and any planned follow-up. Jan replied that the challenge of the meeting was to deal with cumulative effects on caribou and attempt to convince the broad audience that models are a useful tool. Ultimately, ENR wants to determine what thresholds for development, when reached, will begin to cause declines in caribou populations

Much of the feedback about the workshop Jan has received has been positive. The agenda was not followed precisely (day two was to be more technical). The workshop

was set up to look at the same material with the expectation that most would not come to the second day. Most respondents wanted to come for the second day. Day two became more of a session on feedback and commentary. He is developing a workshop report by asking speakers to provide an overview plus make their presentations available as an appendix. Some questions to come out of the workshop include how the information should be gathered and what can be done about the other herds where less information is possible.

A demonstration project in the summer range of the Bathurst herd (that coincides with the diamond mining area) will be attempted, similar to the project involving Anne Gunn working with the elders in the Dehcho region to map caribou habitat. The Dehcho project involves using elders' maps of trails and hunting success as a way of mapping habitat quality. The model could simulate scenarios such as more mines and what the effects may be. Another workshop could be set up with a larger audience to have something solid to show people as a follow up. Jan indicated that Sue Fleck, GNWT spoke about a TK working group that could look for ways to increase use of TK and integrate it with technical material.

A recent survey of the Beverly herd suggests its numbers are low. The Ahiak herd is possibly more stable but good estimates are not available without more radio collar data. At this point not enough is known about the more recent health of the Beverly herd and this needs to be improved.

On the topic of the ENR budget and staff situation Jan reported that the best assumption is that funding for caribou work is safe as it is a high priority. Jan put in a budget proposal and DIAND appears supportive of a demonstration project. A small team of researchers has been requested to put together a proposal for this work.

The Directors asked Jan if there is anything that the Agency can do to support further work on cumulative effects. Jan replied that a letter of support for continued work on cumulative effect modelling at some point may be helpful.

MEETING WITH SLEMA (David While, Zhong Liu)

SLEMA had a recent board meeting and wildlife workshop that was well attended by GNWT wildlife biologists and elders. TK incorporation is a key aspect of their work. One of the challenges is reconciling the numeric scientific approach and the elder interest in wildlife observation. The Directors requested a copy of the summary comments or notes from the meeting and Dave agreed to provide them when they are available.

SLEMA plans to visit Snap Lake in May for a workshop. Documents SLEMA is working on, as received from De Beers, include air quality monitoring, vegetation monitoring, wildlife monitoring and management and hydrology. The aquatic monitoring plan is due soon.

Groundwater discharge volume remains double what was originally estimated but has stabilized or reduced. TDS and chloride concentration remain an issue. Water level change in other lakes (as reported by Diavik) shows that there appears to be regional trend towards lower lake levels. The water level changes at Snap Lake are much less than natural variability at this point in time.

The staff have been developing a plain language package for informing the board members about water quality and how to test it.

In response to a question from the Directors about how De Beers is monitoring fish habitat that has been created (an artificial reef), David replied that it was found with fish eggs, and the stream habitat compensation area is now being used by grayling. David also mentioned that the DIAND Inspector is going to be doing some training on water quality sampling.

MEETING WITH WLWB (Kathy Racher and Ryan Fequet) and EMAB (John McCullum)

Reviewing AMPs - The Directors invited the WLWB staff to discuss the review of the WAMP required from BHPB. Kathy replied that in order to evaluate the document you must first determine what it needs to contain. She arrived at the WLWB early in 2008 and is tasked with managing the BHPB and Diavik files to bring consistency to the diamond mine regulatory processes. The WAMP is a good example of where consistency would be helpful to avoid having completely different approaches to the plans by two companies located in the same area. There is no nationally recognized standard available for what a mining operation AMP should be. Interveners had asked the board to require these plans but it was not clear exactly what was asked for. The Reasons for Decision available from the MVLWB following the Ekati licence renewal has some guidance for what must be in the plan but most reviewers have different ideas. Some guiding principles are needed to show what the board wants in order for it to be able to better review the plans. The review process will hopefully provide a framework or principles to better review and improve the plans.

EMAB review - John mentioned that EMAB is scheduling an adaptive management workshop for Diavik as part of its strategic planning. This will not be complete prior to the deadline for the review. Kathy replied that if EMAB needs extra time, the WLWB may be open to this.

WLWB limits - the Directors asked Kathy what direction the WLWB has set regarding the prospect of BHPB modifying its WAMP. She replied that the WLWB ability to set limits on discharges exists in the realm of the watershed but likely not beyond. The Directors requested the WLWB keep in mind the concrete concept that there should be a management response when change in a water quality or quantity is detected through the AEMP. The Directors commented that the Agency was originally opposed to have a requirement for a WAMP rather than a site wide AMP, as adaptive management was the

basis for the original approval of the project, but had accepted that, in the context of a water licence, this was reasonable.

Adaptive Management workshop - Directors thanked the WLWB for hosting the recent AM workshop. They felt that it was unfortunate that there was no discussion of applying the principles of AM to the actual plans as submitted to date as many meeting participants would have benefited from that discussion. The Directors noted that the Agency submitted a letter to BHPB in October 2006 on expectations for the WAMP, and that this was done at the invitation of BHPB. A copy of the letter was given to Ryan and Kathy.

WLWB expectations – At this point, the WLWB would like to focus on high level thinking on the plans and how they might be improved. Directors replied that having looked at the proposed WAMP there are some issues of process and principles of AM, there are issues of scope that we may not agree with, and then there is the tiered threshold approach used and the actual thresholds selected for a variety of physical and chemical parameters. WLWB staff suggested the threshold review will occur later and separately. The WLWB feels that the list of requirements in the licence is a minimum of what needs to be contained and that BHPB acted reasonably when it used the list to develop its plan. The purpose of the WAMP is to help to avoid unanticipated adverse effects. This allows studies to be undertaken to understand the problem and the management actions that can be taken to ensure regulatory limits are met and that the environment is protected.

Development of AEMP effect sizes – The Directors mentioned that BHPB has yet to develop effects size criteria and this needs to be done collaboratively. The Directors mentioned that this work is important for the development of the WAMP.

Fish Habitat enhancement and ICRP – The Directors mentioned that the Agency is concerned that the issue of fish habitat enhancement as part of closure planning not necessarily be closed before the WLWB if there is an agreement between DFO and BHPB on the interpretation of the Fisheries Authorizations. The Directors also commented on the Pit Lakes Terms of Reference (earlier approved by the WLWB) and that it appears that BHPB no longer intends to pursue research on fisheries habitat or safe passage through the pit lakes. Kathy replied that the WLWB has not seen or dealt with any agreement between DFO and BHPB and that the issue is not closed even if an agreement is reached. She also mentioned that BHPB has proposed a March 20th meeting to review progress on the Pit Lakes Studies and how this is to be integrated into the Reclamation Research Plan as part of the ICRP.

MEETING WITH BHPB (Eric Denholm)

Monitoring Reports - Eric reported that the Ekati monitoring reports are in preparation and timely delivery is looking possible. The 2007 AEMP is larger than most years due to a fisheries component. The WEMP is complete but copies are not yet available in Yellowknife. BHPB Staff is occupied working on the Sable, Pigeon and Beartooth licence renewal application and expects to submit this to the WLWB by the end of

March. This suggests that the 2007 AEMP and PDC reports may take longer to review internally by the company, although the LLCF water quality study should be available by the end of March and has been updated to include results from the 2007 AEMP. BHPB has considered the water licence renewal comments received following the IACT meeting, including those from the Agency. The molybdenum risk assessment has been delayed.

AEMP lake variability and effect size – BHPB is seeking an extension beyond the deadline (already passed) and expects to be able to submit this report towards the end of April 2008. A proposal on August only sampling may be planned and multivariate analysis is now part of the AEMP annually.

Report length – A discussion on keeping the reports succinct and focused on the most important issues and how to do this occurred. BHPB is aware that the reports are lengthy.

Agency Annual report process – The Directors reported that the Agency meets to develop a report draft in late April and this creates a sense of urgency to ensure the BHPB monitoring reports are available to review. It also meets with EA Signatories to receive responses to recommendations. Eric undertook to provide the annual monitoring program reports before the Agency report writing meeting.

Adaptive management plan – BHPB's was written based on the water licence requirement and there is concern that there should not be a comparison amongst the two plans submitted as an exercise in generating principles of AM for diamond mines. BHPB would like to see the review not go along those lines where expectations increase for the plan beyond what was specified in the water licence.

TK annual report – BHPB is contemplating a TK annual report with details yet to be determined. BHPB expects to be able to report progress on its overall approach to TK integration by the end of June 2008.

Mediation update – The Directors reminded Eric that Agency costs for participation in the mediation should be split by BHPB and the governments. The Agency will submit a list of expenses to BHPB and governments in a timely manner. It was mentioned that Agency expenses to date were approximately \$5800. The Agency has also agreed to sign the revised Resolution Agreement based on an update to the text.

Other Comments – The Directors mentioned that the Agency would like a small sample of processed kimberlite from the LLCF. The Agency requested a site visit during the week of September 8-12, 2008 if possible.

Action Item #3 – Kevin to send a reminder e-mail to Eric about the proposed site visit during the week of September 8-12, 2008 and the dates for a Board meeting in Lutsel K'e.

Incinerator Scrubber fluids – Eric agreed to look into the content and volume of incinerator scrubber fluid and provide that information to the Agency.

SCHEDULE PLANNING

The Directors discussed attendance at an upcoming meeting to be hosted by BHPB/Rescan on pit lakes (March 20th). It was agreed that one Director should attend.

Action Item #4 – Tim to attend Pit Lake Studies meeting on March 20, 2008 in Yellowknife.

Environmental Agreement Implementation Meeting – It was proposed that this meeting be held on June 2, 2008 to be followed by an Agency Board meeting.

Next Board Meeting – 60th board meeting scheduled for June 3-6, 2008 so as to follow the *EA Implementation* meeting.

Meeting Adjourned.

Summary of Discussion Approved by

- ORIGINAL SIGNED BY -

Jaida Ohokannoak, Secretary Treasurer.