Independent Environmental Monitoring Agency 66th Meeting of the Board of Directors Gameti and Yellowknife, NWT October 7-8, 2009 Summary of Discussion

Revised: November 13, 2009

<u>Directors</u> <u>Guests</u>

Tim Byers Chief Eddie Chocolate, Community Government, Gameti

Audrey Enge Eric Denholm, BHP Billiton Laura Johnston Karl Schubert, BHP Billiton

Jaida Ohokannoak

Tony Pearse Kim Poole Bill Ross

Staff

John Morrison, Environmental Analyst

Kevin O'Reilly, Manager

The Board and staff flew on a chartered flight to Gameti in the late afternoon on October 6, with a Board meeting at the Community Government office the following day. Chief Eddie Chocolate welcomed the Agency to his community during the business part of the meeting and the Agency Chairperson invited him to the open house and offered that the Board was available to meet with him and/or his Council the next day.

On the evening of October 7, the Agency hosted a community meeting and open house that was attended by approximately 50 people. The Agency made a short presentation that was followed by a question and answer period where the Agency committed to convey concerns expressed back to the company and to governments.

The Agency Board meeting continued on the morning of October 8 until the Board and staff flew back on a chartered flight to Yellowknife in the early afternoon. A short presentation was also made to a couple of classes at Jean Wetrade School in Gameti. A short meeting was held in Yellowknife where the Board met with representatives of BHP Billiton.

AGENCY BUSINESS

Information Updates

Bill—Attended the WLWB hearing on BHPB's motion regarding WLWB authority over fish habitat, participated in the Environmental Impact Report (EIR) 2009 site meeting in August 2009 and assisted with the interviews for the new Environmental Analyst.

Laura—Reviewed the amalgamated water licence issued by the Wek'eezhii Land and Water Board (WLWB).

Audrey—Attended a caribou strategy workshop in late September on behalf of the North Slave Metis Alliance.

Jaida—Carried out regular Agency business and met with the Auditor the day before the Board meeting to discuss the management letter recommendations from the recent audit.

Tony—Started to review the Beartooth option study that was provided to the Agency in confidence by BHPB. He also reviewed the Mackenzie Valley Land and Water Board closure plan guidelines and BHPB's judicial review application.

Tim—Participated on interview team for the new Environmental Analyst. He reviewed the consultant's report for the Aquatic Effects Monitoring Program Traditional Knowledge working group report for DIAND. The report was a good literature review but could be made more readable and accessible for users.

Kim—Reported briefly on his involvement with the diamond mine wildlife monitoring program review (see the fuller discussion below).

Kevin—With Tim, prepared an update for the Akaitcho Treaty 8 Impact and Benefit Agreement office. Irene Catholique is the staff in the office which has been empty for the last couple of years. A presentation was prepared and delivered at the Northern Latitudes Mining Reclamation Workshop in Yellowknife. Kevin also offered some assistance in organizing the entertainment and hosting the closing banquet for the workshop. He also attended the EIR 2009 site meeting and took a number of photos for use in next year's Annual Report. He assisted with the hiring and orientation of the new Environmental Analyst. An Agency submission was prepared on the MVLWB closure plan guidelines. Kevin and John represented the Agency at the Diamond Mine Wildlife Monitoring Workshop in N'dilo on September 22-23.

John—Spent time becoming familiar with office routines and preparing for this Board meeting.

Financial Report

The Board reviewed the financial update and variance report to August 31. The Separate Fund should show a budget allocation of \$40k for future years.

With upcoming changes to audit principles, it will be necessary for the Agency to develop a written policy on expense allocation and another on approval of journal entries by the bookkeepers. Jaida and Kevin met with the auditor to discuss this recommendation and will bring back draft written policies for Board review and approval. Changes to the current honouraria and travel claim form for Directors were also discussed, as a spreadsheet format should make calculations and tracking easier. Kim offered to assist with a new format.

Action Item #1 Jaida and Kevin to prepare draft written policies for Agency expense allocations and approval of journal entries made by the bookkeepers.

Action Item #2 Kevin to revise the honouraria and travel claim form for Directors.

As a response to McKay audit recommendations, there was a discussion of guaranteed investments certificates (GIC) signing authority. The Directors agreed that all Agency-initiated transfers into or from the Agency's GIC will require authorization from two signing authorities. The account manager at Bank of Nova Scotia is already authorized to make transfers as necessary to avoid any bank overdrafts.

A letter will be prepared to respond to the observations and recommendations made by the auditor as a result of the last audit.

Action Item #3 Jaida and Kevin to draft a letter responding to the audit observations and recommendations.

There was some discussion of the advantages of direct deposit of payroll for the Agency.

Action Item #4 Kevin to check on the costs and procedures for direct deposit of Agency employee payroll.

ENVIRONMENTAL IMPACT REPORT 2009

A response to the Environmental Impact Report (EIR) 2009 is due the week of October 12, 2009. Exceedances of CCME guidelines for nitrate and molybdenum were discussed. Many of the same issues that were raised three years ago by the Agency turn up again in this EIR.

Use of false positive impacts (e.g. frozen tundra under waste rock piles, revegetation) are found again. Some adaptive management examples are not accurate. There is a lack of justification on the residual effects significance ratings and conclusions. The EIR identifies only two moderate impacts from the mine—parasites in slimy sculpin and detrimental effects of oversampling on local fish populations. The focus of the EIR is thus on these impacts and not on what the Agency has identified as the most significant effects of the mine, namely the changes in downstream water quality and impacts on the declining Bathurst caribou herd.

It was agreed that these issues would be raised with Eric Denholm when the Agency meets with BHPB later in the Board meeting. The requirement in the Environmental Agreement for consultation before or during the EIR preparation in an effort to avoid the concerns noted above, was also to be raised.

JUDICIAL REVIEW

An in-camera discussion was held regarding BHPB's application for judicial review of the WLWB's decision on its jurisdiction over fish and fish habitat at closure.

It will likely take several months for the public hearing on the ICRP to be rescheduled by the WLWB. There was some discussion as to whether the Agency should recommend to the WLWB that BHPB take this 'down' time to conduct a number of the revisions that are necessary to the ICRP, including the Reclamation Research Plans.

Action Item #5 Kevin to check with the WLWB staff on the potential to have BHPB prepare some revisions to the ICRP while the public hearing is being rescheduled. A letter to the WLWB from the Agency suggesting revisions may be drafted.

MVLWB CLOSURE PLAN GUIDELINES

The Agency noted BHPB's response to the MVLWB Closure Plan Guidelines and that several of the major points were similar to concerns raised by the Agency. It was unclear what the next steps by the MVLWB may be.

Action Item #6 Kevin to check on the status of the MVLWB Closure Plan Guidelines.

ANNUAL REPORT

There was a discussion of Agency Annual Report production and products. A draft brochure of the 2008-09 Annual Report was reviewed and comments provided.

Action Item #7 Kevin to revise the brochure and to arrange for printing and distribution.

There was some discussion of a video version of the Agency's Plain Language Annual Report, with voice-over in Aboriginal languages. Such a product would have to be scripted carefully and it is not clear what changes would be necessary if a video is to be done each year. It was agreed to raise the suggestion of a video version of the Plain Language Annual Report at the Agency's Annual General Meeting in December 2009.

DIAMOND MINE MONITORING WORKSHOP (Sept 22-23, 2009 in N'dilo)

This workshop was held in N'dilo on September 22-23, 2009 and attended by Kevin and John. It was felt that grizzly bear and caribou monitoring still require a lot of discussion and further work. It was noted that the next steps are not clear but a larger workshop may again be held in January 2010, assuming that there is sufficient progress on some of the outstanding issues before then, likely through small group discussion.

It was agreed that once a summary of the workshop is available, the Agency will prepare a follow-up letter to help guide future work by tying back any changes in monitoring to revised objectives and adaptive management. The letter should also address issues of the consistency of the monitoring methods and programs by the different mines, and the linkages to improve cumulative effects assessment and management. Kim volunteered to begin work on a submission from the Agency and suggested that he would also try to work with Anne Gunn as a Snap Lake Environmental Monitoring Agency advisor and fellow wildlife expert.

Action Item #8 Kim to draft an Agency follow-up letter to help guide the review of the diamond mine wildlife monitoring programs, in collaboration with Anne Gunn.

AGENCY ANNUAL GENERAL MEETING

Board meeting will take place on December 2 followed by the Annual General Meeting the next morning. The earlier part of the afternoon will be reserved for any issues or discussions with the Aboriginal Society members. Some changes to the draft notice for the AGM were suggested. A summary page of the recommendations from the external review will also be distributed with the agenda and notice.

It was agreed that the presentations for the AGM would need to be tightened up to allow sufficient time for a discussion of the findings of the external review conducted earlier this year. This discussion will be led by one of the consultants, Shelagh Montgomery. The possibility of a Christmas Open House, with the Environmental Monitoring Advisory Board and SLEMA was discussed.

Action Item #9 Kevin to revise the official notice for the AGM and send it out.

Action Item #10 Kevin to contact EMAB and SLEMA about the possibility of a joint Christmas Open House in the late afternoon and early evening of December 3, 2009.

The Agency now has a limited supply of promotional items still on hand such as ball caps, pens, glasses and bags. It was suggested that some more should be acquired before the AGM.

Action Item #11 John to check into pricing and quantities for promotional items in time for the Agency AGM.

PANDA DIVERSION CHANNEL MONITORING

The Agency received the 2008 PDC monitoring report but it has not yet been reviewed. It appears that the productivity of the PDC is declining compared to other control sites. It is not clear what monitoring BHPB intends to carry out on the PDC now that the ten-year program under the Fisheries Authorization has been completed.

Action Item #12 Tim to review the 2008 PDC monitoring report for further follow-up with BHPB.

BEARTOOTH PIT AS A MINE WATER SUMP

On June 10, 2009 the WLWB approved the use of Beartooth pit as a sump for mine water. The Agency understands that this is set to begin in November. Some concern was raised with the decision by the WLWB on this approval as the additional information submitted by BHPB, the EBA Engineering Study and covering letter, was not made available to interested parties. It was noted that the WLWB has also required that BHPB update the Wastewater Processed Kimberlite Management Plan and that this may afford another opportunity to provide input on monitoring of water quality during pit filling and results from the one borehole between Beartooth and Panda, including triggers and thresholds for contingency measures.

BHPB also provided a copy of an options study for the Beartooth pit to the Agency, in confidence.

Action Item #13 Tony to complete a review of the confidential Beartooth pit options study and a decision will then be made as whether any further follow-up is necessary.

OTHER BUSINESS

A report was made of the June 19 Environmental Agreement Meeting. The next meeting will have new representatives for DIAND and BHPB.

On the amalgamated water licence, further review of the Reasons for Decision is to be undertaken. It was noted that the WLWB removed the provision of the previous Sable, Pigeon and Beartooth water licence requiring fish passage through the Pigeon Diversion Channel, to avoid duplication with the Fisheries Authorization. The implications of this statement are not entirely clear. The Reasons for Decision reflect a stronger, more evidence based approach, something that the Agency needs to consider in preparing future submissions to the WLWB.

There was a follow-up discussion from the issues raised at the community Open House the previous evening. While there are six open pits as part of the mine, an opportunity to backfill has not materialized. The first available pit was Beartooth but it is now to be used to store mine water. Since BHPB does not intend to store waste rock in the open pits now or at closure, the company needs to do a lot of work, especially within the communities, to explain why it has adopted this approach.

MEETING WITH BHP BILLITON (Karl Schubert and Eric Denholm)

Introductions

Karl Schubert introduced himself to the Directors as the new Manager of Health, Safety, Environment and Community at Ekati. He was born in Rhodesia, then went to South Africa. His background is in environmental management. He previously worked for

BHPB in coal mining and has lived in Yellowknife for 10 months. He looks forward to visiting the communities.

It was explained that three Agency Directors were appointed by BHPB and the two governments, in consultation with the Aboriginal governments. Four other Directors are directly appointed by Aboriginal governments. Once appointed, all Directors are independent of the parties that appointed them although there is obviously some effort and responsibility to report back to them on matters of interest. The Agency tries to maintain informal communications with BHPB. The Directors and staff provided some background information on their experience and interests for the benefit of Karl.

Gameti Visit Summary

Bill Ross provided a quick summary of the Agency's visit to Gameti. He mentioned the concerns raised at the Open House, including the persistent belief that waste rock should be placed back in the pits at closure. There is also a lot of concern with the quality of the water in the pit lakes after closure. Residents want more local involvement in the monitoring and to see all parts of the mine during visits. The community was encouraged to discuss this and other concerns directly with the company. The Agency committed to bringing the community's concerns to the attention of the company and government agencies.

Karl Schubert asked whether the community viewed the Agency as 'independent'. Bill stated that he clarified the Agency's independence at the beginning of the presentation and repeated this several times in answering questions. The message appeared to be well received except for a few elders who may have confused the Agency with the company. Experienced interpreters who were familiar with the Agency also assisted in making sure that the concept of independence was communicated clearly.

EIR 2009

There was a discussion of the Agency's concerns with the EIR 2009. Parasites in slimy sculpins and the impacts of sampling on local fish populations were the only two impacts rated as moderate and hence would be construed as the most important impacts of the Mine. The Agency is of the view that the changing water quality downstream of the mine and effects of the mine on caribou are much more important. Some conclusions drawn in the EIR are not supported by the monitoring. Some of the reported positive effects of the project are not correct, such as permafrost moving through waste rock piles. The requirement for consultation with the Agency during compilation of the EIR is part of the Environmental Agreement and the Agency expressed its concern that it has yet to happen.

Eric noted that the timing of EIR at the end of April every third year creates very tight turnaround times for the company and consultation with all parties would be very difficult. It is hard to get a roll up of last year's monitoring results in time to be included in the EIR

The Agency stated that it will be submitting its comments on the EIR the week following this Board meeting and is trying to determine whether a Minister's Report is warranted. The Agency raised the issue of the EIR's incorrect statements of no CCME exceedances when there were several for nitrates and molybdenum over the last year. Prior discussion may resolve this kind of issue or reduce the number of issues.

Eric indicated that Rescan has been requested to respond to the CCME exceedances issue as this was also raised by DIAND. As he understands it, the aquatic monitoring data presentation in the EIR is based on regression analysis and trends, not absolute values from the monitoring.

Ekati Update

Eric spoke to several points on a hand out. Caribou have passed through Ekati. No major difficulties reported so far. Three caribou mortalities related to fence entanglements occurred at site, two bulls with the carcasses sent to Yellowknife. GNWT Environment and Natural Resources was notified. Eric indicated that it is probably time to re-examine the best way to deter caribou including use of inukshuks, electric fences, and snow fences. BHPB will check with Diavik and EMAB regarding caribou deterrence methods.

The Agency asked what the next steps may be in the review of the diamond mine wildlife monitoring programs. Eric indicated that Dave Abernethy is the contact person for BHPB. Bill Ross said that the Agency would be sending a follow-up letter to try to move things along.

Eric stated that BHPB is hoping to set a date for the judicial review court hearing before Christmas. Bill Ross mentioned that the Agency's legal counsel had sought clarification from BHPB on whether it would oppose the Agency becoming an intervenor but there had been no response to date. Eric said that BHPB would not oppose the Agency becoming an intervenor and that he would instruct BHPB's legal counsel to notify the Agency's counsel to that effect.

The 2008 Air Quality Monitoring Report is almost completed and should be released in a couple of weeks. A report on the special Cell E fish study is under review internally. The mine water lines to Beartooth are almost ready and expected to go into operation in November.

There was a discussion of the three tiers of audits that BHPB undertakes for its operations. The first is carried out internally. Second, every three years there is an audit performed by an external BHPB team from other parts of the company. Last, there are international level audits such as ISO 14000 that require regular certification or evaluation. In October, Ekati is up for the second tier external audit. Karl Schubert offered to share the results with the Agency.

Bill indicated that the Agency would be most interested in seeing the environmental side of the audit if it could be made available. Karl indicated that would not be a problem.

Eric discussed the Mining Association of Canada's Towards Sustainable Mining initiative. There is a series of four protocols that require self-assessment each year and an external verification every three years. BHPB's work on this can be discussed further at another meeting if the Agency has any interest. The external auditors are trained each year and the verification allows benchmarking against other companies and mines within Canada. This may have financial implications for companies in terms of investor confidence and ratings.

Karl provided the Agency with copies of BHPB's Ekati sustainable development report for 2008 and some other materials. He mentioned that there is a new President for Ekati, Paul Harvey, who has previous site experience as he directed underground development and operations. Eric agreed to provide a new organizational chart when the new President is in place. Laura Tyler is now in charge of all production, underground, surface and the plant itself. Sarah Baines is leaving and going to SENES consultants.

The Aquatic Effects Monitoring Program three-year review was discussed. BHPB has not yet decided on the approach for the review but is contemplating a limited scope that would include aquatic parameters and biophysical sampling, but not the fish component. The rationale provided was that the Cell E fish study would not be available in time for the three-year review and the DFO research on northern fish species might be further along. The fish component for the AEMP review would be done a little later and in time for the next five-year sampling session. The Agency's views on this approach were solicited.

The preliminary views of Agency Directors and staff were provided. Aboriginal communities have expressed concerns about the current fish sampling methods and there may be some merit in looking into non-lethal techniques. The current AEMP represents an integrated chemical and biological program for detecting changes in the aquatic environment downstream of the mine and splitting the review may not be a helpful move in maintaining the integrity of the program or its review. It was not clear how the effects size work could be considered in the three-year review if the fish component was split off for later review.

BHPB indicated that the biological monitoring would continue during the AEMP review and that further discussion or input was welcome. A report for the three-year review should be distributed in early December with a two-day technical workshop likely to be held in January 2010. The Agency indicated that if BHPB proposes any changes to the AEMP, there should be a clear and logical rationale provided.

The Agency raised the issue of the future of monitoring in the Panda Diversion Channel. Eric indicated that the same monitoring as was done this previous season would probably be carried out again in 2010. BHPB needs to discuss this with DFO. The Agency

mentioned that the capture and counting of fin-clipped grayling should be a priority and that the declining number of spawners is a concern.

Eric stated that there would be a test pit and bulk sample taken from the Pigeon pipe during the late winter. If the sampling proves successful, the Pigeon Diversion Channel would be constructed in the winter of 2010-11.

A decision point on future Misery mining options is coming soon. This involves alternatives such as a pit pushback and underground mining. If underground mining is selected, there will have to be some discussion with the WLWB as the current licence includes surface mining only for Misery. The Agency mentioned that the proximity of the pit to Lac de Gras may be an issue for underground mining operations.

The nitrate reduction testing in Cell D appears to have been a success this past summer. BHPB will distribute a report on this late this year or early next.

Continued progress has been made on reducing production costs. The Wirtgen mining machines are working well and can strip about nine inches of material at a time, leaving it in windrows for further sorting and processing. The teeth on the miners break if granite is hit. Further research and development into underwater mining techniques is being carried out off-site, in South Africa.

The Agency asked BHPB whether there would be any monitoring of Beartooth pit and water quality while it is being used as a sump for mine water storage. Eric stated that there may be some monitoring of water in the winter only due to difficult access into the pit bottom. One side of the pit is not stable and required bolts and screens during active mining. With the mining completed, there is no reason to maintain this pit. Access by snowmobile in the winter is safer and this is when there may be some monitoring carried out. Monitoring of inputs into Beartooth will be possible but not the mixing that may take place.

The Agency asked about progress on the pit lake studies. Eric indicated this work is still in process. There will be two reports. One to look at any effects on fish and fish habitat in the source lakes to be used for pump flooding the pits, and the second will be a model for pit water quality. No dates for the release of the reports at this point.

The Agency noted that the second payment of the annual funding from BHPB was now overdue. Eric stated that the delay may be due to the regular staff member who handles this area being away on holidays. Eric committed to taking care of this matter right away.

Following the meeting with BHPB it was decided to ask the Agency staff to look into the Mining Association of Canada's Towards Sustainable Mining initiative.

Action Item #14 John to review the Towards Sustainable Mining initiative and to prepare a briefing note for the Directors.

FUTURE MEETINGS

For future meetings past December, it was agreed that the week of January 18-22, 2010 should be set aside as well as March 30-April 1.

It was also agreed that May 11-13 should be reserved for the Agency's Annual Report writing session. Staff were directed to check on the availability of the Lady MacDonald Country Inn at Canmore and to reserve the facility for the use of the Agency.

Action Item #15 Staff to check on the availability of the Lady MacDonald Country Inn in Canmore for the Agency's Annual Report writing session May 11-13, 2009.

MEETING TERMINATED at 4:30 pm

Summary of Discussion Approved by Jaida Ohokannoak, Secretary Treasurer.