

***Independent Environmental Monitoring Agency  
62<sup>nd</sup> Meeting of the Board of Directors  
Yellowknife, NWT  
December 4<sup>th</sup> – 5<sup>th</sup>, 2008  
Summary of Discussion***

Revised: January 23, 2009

---

Directors

Bill Ross  
Tim Byers  
Tony Pearse  
Jaida Ohokannoak  
Kim Poole  
Laura Johnston  
Brad Enge

Guests

Jason Brennan, DIAND Inspector  
Carole Mills, DIAND Water Resources  
Michelle Culhane, DIAND Water Resources  
John McCullum, EMAB  
Florence Catholique, Lutsel K'e First Nation

Staff

Kevin O'Reilly  
Scott Duguid

---

REVIEW OF AGENDA

Additional documents for review which were not included in the agenda:

- 1) DFO Fish Mortality Policy
- 2) DIAND Water Quality Standards discussion paper by Don McDonald

New agenda items:

Executive election  
Signing authority for the Agency on its bank account

INFORMATION UPDATES

In addition to routine review of Agency Communications:

Bill – Dealt with regular agency communications and review of documents.

Tony - Dealt with regular agency communications and review of documents.

Laura – Went with Tim and Kevin to SPB Water License renewal technical session. It was a helpful meeting. There was a long list of Information Requests that will go to the company from the Wek'eezhii Land and Water Board (WLWB). The Agency's concerns were largely addressed at the meeting or by the information that may be forthcoming from BHPB. There was a reminder to be aware of the mixing zone when conducting the above review of the new information.

Jaida – worked on the Risk Management Policy for the Agency with Kevin. Jaida participated in recruitment for the new Environmental Analyst. It was agreed upon, after discussion, that there should be consideration of a business resumption plan included within the Risk Management Plan.

Tim – Attended an Aquatic Toxicity Workshop, in Saskatoon which included highlights of an Ontario Supreme Court legal case dealing with bioavailability versus total concentration levels of contaminants. He also participated in the DIAND Water Resources Division AEMP guidelines workshop October 24-25. There was a strong suggestion at the Workshop that DIAND needs to incorporate TK into the monitoring plans. There was also a suggestion from Tim in a presentation he was invited to make at the workshop about the use of Aboriginal taxonomies. For example, subclasses of species are often recognized by traditional fishers but not recognized by science. Tim also participated in the recruitment of the new Environmental Analyst.

Brad - Dealt with regular agency communications and review of documents and participated in a site visit of Ekati with Kevin, that consisted of the Inter-Agency Coordination Team (IACT).

Kim - Dealt with regular agency communications and review of documents including discussions with Robert Mulders of GNWT on wolverine monitoring. Kim also worked on preparation of material for his presentations at the Environmental Workshop.

Kim noted that it is not possible to fully access the 2007-8 Agency Annual Report on website. There are problems in Firefox and Internet Explorer.

Action item #1 – Scott to explore how to make the site to work effectively and to check the 2007-8 Annual Report postings.
--

Kevin: Provided an update to EMAB and SLEMA on Agency activities. Kevin assisted with recruitment and hiring of the new Environmental Analyst. He also drafted and submitted a proposal to DIAND on an external review of the Agency. Prepared presentations and finalized logistics for the Environmental Workshop, the AGM, and the Board Meeting. He also drafted a Risk Management policy with Jaida that should come forward at the next Board meeting. Attended the AEMP guidelines workshop on the first day of the meeting and participated in the SPB water licence renewal technical session. Kevin went on the IACT site visit with Brad. He presented an update on the Fay Lake spill based on his observations during that visit.

## FINANCES

Jaida presented the 2008-09 year-to-date Expenditures and Variance Report. Jaida reported that the Agency is financially on track and that Director costs are lower than expected. She highlighted that the Variance Report shows where the September Board of Directors meeting was expensed under the Lutsel K'e community visit. The Directors discussed the projected amount of time needed and the allocation of funds for specific

document review. Jaida advised the Directors that there are funds available for community visits. The Directors discussed the allocation of funds and time required to produce the Annual Report. There was also discussion of the potential for use of an outside consultant for assistance with one of the four agency priorities as stated in last year's Annual Report.

Action item #2 – Kevin and Tony to inquire about consultant to assist with review of slurry and tailings.

Jaida suggested that there is a need for a community meeting with the NSMA. Brad committed to check with NSMA and try to schedule a community meeting around the NSMA elections in March. Kevin suggested that the Agency could consider translating some reports and documents into Chipewyan or other Aboriginal languages. Kevin also suggested that the Directors might want to look at results of the external review before any further allocation of funds towards communications to ensure a more responsive approach. Tim, recalling an idea first raised by Jaida, suggested production of a videotape of meetings that may be important to communities and could be sent to them as a DVD. Laura suggested production of a brochure of who we are and what we do, translated into the relevant Aboriginal Languages. Kevin recommended that the Agency consider some external assistance with the production of the Agency timeline/chronology, and also suggested creating a poster containing the timeline. There was also some discussion and agreement that a new general information poster of who we are and what we do would be useful.

The Agency has not yet received an invoice from Lutsel K'e regarding the September community visit.

No further adjustments to the work plan were suggested.

## EXECUTIVE ELECTIONS

Elections were held for the following positions, Chairperson, Vice Chairperson and Secretary Treasurer, as required in the Agency by-laws.

### Chair

Moved by Tim, seconded by Tony, that Bill serve in the position of Chairperson. Carried unanimously.

### Vice Chair

Moved by Jaida, seconded by Tony, that Tim serve in the position of Vice-Chairperson. Carried unanimously.

### Secretary/ Treasurer

Moved by Laura, seconded by Kim, that Jaida serve in the position of Secretary-Treasurer. Carried unanimously.

#### AGM AND ENVIRONMENTAL WORKSHOP DEBRIEFING

There was a discussion about unresolved issues and questions raised at the Agency Environmental Workshop and the Annual General Meeting.

Tim mentioned that there may be some confusion in the terminology when referring to the Diavik and Ekati mine. It is due to the fact that the word “Ekati” in Tlicho refers to Lac De Gras, so Tlicho speakers may think of Diavik when they hear Ekati mine (“mine on Lac De Gras”).

Bill raised the question to the Directors, that if trout and whitefish eat slimy sculpin, why don't they get tapeworms? Tim mentioned that Bruce Hanna of DFO has also asked the same question. Tim volunteered to find out the answer and report back to the Directors.

Action item #3 – Tim will research the issue of whether there is a transfer of tapeworms from sculpin to other fish.
--

Tim researched Jason Brennan's claim that the Agency reported hydrocarbon in fish bile from the 2007 Environmental Workshop presentation, and found that the Agency did not present anything about hydrocarbons in fish as there was no fish sampling in 2005 or 2006, and hydrocarbons are not checked in the annual PDC monitoring of grayling.

Tony had discussion with the Tlicho representatives after the Environmental Workshop, and they have concerns about use of some of the English lake names rather than traditional Tlicho names. It was suggested a place name map for Tlicho and Chipewyan land features be located and put up in the boardroom. There was mention that the Wek'eezhii Renewable Resources Board (WRRB) may have a copy of a map with traditional feature names. It was also suggested that the WRRB staff should be invited to the next Environmental Workshop.

It was noted that the Directors did not review presentations as a group, and discussed whether there should be a group edit prior to the next Environmental Workshop. It was decided that there would be no group editing of presentations prior to the next Environmental Workshop.

There was comment that there were too many slides and too much text in presentations. It was recommended that the presentations should contain more photos and be simpler, and the handout notes with the slides can be more in depth and detailed. It was suggested that in advance of the Annual Report staff find out if there are photos of certain animals and fish on file at the Agency.

Action item #4 –Scott to look through the Agency's photos with a view to creating a key word catalogue.
---

The Directors noticed that there was little or no participation in a meeting of the Aboriginal society members with the Board and wondered if there is interest anymore. It was suggested that we canvass participants before hand to determine the level of interest in advance of scheduling the time.

At the Environmental Workshop there was a comment from the Yellowknives Dene First Nation about the fish sampling by BHPB every 5 years adversely affecting the fish population. The Directors discussed the possibility of looking at fish age versus contaminant levels, the potential of fewer gill net hours, and the possibility of testing other species of fish, for example, lake chub and sculpin instead of lake trout and whitefish.

#### DIAMOND MINE WILDLIFE MONITORING PROGRAMS MEETING

A letter from Rio Tinto (Diavik) proposing a meeting to better coordinate diamond mine wildlife monitoring programs was discussed. It was suggested that Kim and Kevin should attend this meeting on behalf of the Agency, as this is an issue that the Agency has consistently raised over the years. It was suggested that the need for Aboriginal government involvement should be raised at the meeting.

Action Item #5 – Kevin to work with Bill and Kim to respond to the invitation to participate in the meeting on diamond mine wildlife monitoring programs.
---

#### SPB WATER LICENSE RENEWAL - TECHNICAL SESSION

The Agency representatives at the November 4-5, 2008 technical session felt that it was a helpful meeting and that a detailed information request has now gone from the WLWB to BHPB. There could be a lot of material to look through when the response comes in on January 16, 2009. It was decided that Laura Johnston and/or Tim Byers will attend the public hearing in March 2009. There was discussion regarding whether there will be a public hearing as many of the issues have been resolved as a result of the technical sessions. It was felt that the Hearing would still likely be held as a forum for the communities to have their concerns heard. There are also still technical issues such as a mixing zone, time for Board to review documents, and the proposal by BHPB on the need to revise the Effluent Quality Criteria for ammonia, copper, nitrite, nickel and zinc.

The suggested expiry of the amalgamated water license is 2012 and the Agency supports this position. Kevin will attend the SPB Renewal Pre-Hearing Conference, as it is procedural and not technical meeting. The WLWB will not accept new information after the intervention deadline on February 13, 2009.

It was agreed that it is generally better environmental practice to have a hard number for end of pipe discharge rather than a mixing zone where the intermediate area (between discharge and where effluent is measured) is not protected. The concern is the question of where do you apply CCME guidelines? Sometimes background levels may be above CCME guidelines and there may also be a need for acute and chronic toxicity testing.

Licenses usually require acute toxicity at the end of pipe. Some jurisdictions will not allow a mixing zone that bisects a water body and if there is a mixing zone, a Fisheries Act authorization may be required.

#### DISCUSSION WITH JASON BRENNAN, DIAND INSPECTOR

Jason stated that he is satisfied with BHPB's compliance at site and that he is working hard to complete a backlog of inspection reports. Jason will circulate BHPB's response to the warning letter on the Fay Lake spill. He is looking for suggestions regarding any necessary follow-up that will be formalized through a direction letter.

The Directors feel that the Agency and DIAND's response to the spill are similar; that BHPB did a good job of the clean-up and responding appropriately. Jason commented that BHPB accepted responsibility and responded quickly with sufficient resources. Brad asked what terms and conditions are included in the water license as far as monitoring processed kimberlite effluent and spills. Jason informed the Directors that the water license stipulates that effluent be sampled weekly, but BHPB monitors two times per day. BHPB generally checks the discharge spigots but was not checking the level of the LLCF and the road around the LLCF was blocked with snow at the time of the spill. Jason suggested that BHPB might need to use a snowmobile as the road is not completed all the way around Cell B and that snow drifts badly in winter.

The Directors suggested that weekly checks of LLCF would not be sufficient to detect a spill in a timely manner and queried about whether DIAND would be prepared to suggest more frequent inspections be written into licenses. Jason replied that he would like to see terms and conditions of a license require inspection two times per day.

Bill mentioned that BHPB indicated there was a warning letter from EC and DFO regarding the spill, but the Agency has not seen it. Jason advised that he has not seen it either.

Action item #6 –Kevin to contact Environment Canada about getting a copy of the warning letter sent to BHPB about the Fay Lake spill.
---

The Directors asked Jason if there were any further updates or topics for discussion that he wished to be addressed. Jason was concerned about hydrocarbons showing up in fish bile as reported by the Agency at the recent Environmental Workshop. He stated that there is no obvious source of hydrocarbons and that he had ruled out the spill at dyke D. Bill informed Jason that there were small releases of hydrocarbons when BHPB was doing pilot scale testing to extract smaller diamonds and released that PK into the LLCF. Jason wondered whether the hydrocarbons from incomplete combustion, polycyclic aromatic hydrocarbons (PAHs), might be the source as they can attach to dust or dirt and get into lake sediments. There may need to be data collected in radial transects away from the mine to find out if PAHs from the mine might be the source. PAHs might also be found in lake sediments and Kevin suggested that Anne Wilson of EC might be able to

look at this in her current study. Dust from the Airstrip beside Kodiak Lake might also be a potential source.

#### FOLLOW UP ON DIAND AEMP GUIDELINES WORKSHOP

Carole Mills introduced the topic of using TK as part of AEMPs (Aquatic Effects Monitoring Programs) and the development of AEMP Guidelines. There is feedback from communities that there needs to be more use of TK. Carole suggested a literature review of existing TK regarding AEMP. There is support from the Regional Director General for water related issues, TK, and community involvement. Carole proposed a working group composed of Directors of EMAB, IEMA and SLEMA to help manage the work into TK as used in AEMPs. Carole mentioned other aquatic monitoring programs, namely EEM (Environmental Effect Monitoring) which is focused on mines and pulp and paper in the south. There was a discussion regarding the benefits of AEMPs over EEMs. Carole suggested that EEMs are not sensitive enough for the North, and that AEMPs include EEMs plus TK and public involvement.

It was suggested that it would be useful to contract someone to do a paper to scope out how TK can and has been used in AEMPs and how this has changed or improved management of activities and projects. This might also involve the development of a toolbox of approaches, strategies and examples that will be helpful for future proponents, regulators and communities. There was discussion on the use of TK, the intellectual part of it, and intellectual property rights. Carole commented that inclusion of Aboriginal peoples in the planning and decision-making process starts with TK. Carol noted that DIAND would like to see the first phase completed by March 31, 2009. The Agency recognizes that inclusion of TK in AEMP Guidelines is an important initiative and that the experience gained at Ekati is valuable.

The Directors decided that the Agency should participate in a working group to assist DIAND with the initial phase and to help build the toolbox. Jaida will serve as the Agency representative, supported by Brad, Tim, Tony and Kevin. It would be helpful to coordinate working group meetings with other Agency business or for DIAND to reimburse any travel expenses incurred.

Action item #7 –Kevin to contact Carole Mills and advise that the Agency is willing to assist with the initial phase of the TK and AEMPs work through a working group.
--

#### WATER QUALITY OBJECTIVE FOR CHLORIDE

This report details the work that BHPB undertook to investigate the toxicity of chloride as it relates to hardness. The result is a substantially lower proposed discharge criterion for chloride than that in the last report. Kevin confirmed to the Directors that the deadline for comments to the WLWB has been extended until January 9, 2009.

Action item #8 –Laura to review the BHPB report on a proposed water quality objective for chloride by December 19, 2008 to form a possible submission from the Agency to the WLWB on or before January 9, 2009.

#### SIGNATORIES FOR BANK ACCOUNTS

Moved by Jaida, seconded by Laura, that Brad Enge be added as a signing authority for the Agency with regard to financial transactions. Carried unanimously.

As Brad is the only resident Director in Yellowknife, this should make the task of cheque signing easier to manage.

Action Item #9 – Kevin to arrange for Brad as a signing authority for the Agency's financial transactions.

#### FISH MORTALITY POSITION STATEMENT

Tim reviewed the Department of Fisheries and Oceans position statement regarding fish mortality arising from means other than fishing and felt that there is nothing relevant to the Agency mandate. It was agreed that there would be no comments provided.

#### NORTHERN WATER QUALITY STANDARDS

Kevin outlined the background to the discussion paper on northern water quality standards and advised the Directors that December 19, 2008 is the deadline for comments. There was some discussion about how assimilative capacity can be used in developing thresholds that may be relevant to assessing the significance of cumulative effects.

Action Item #10 – Laura to review the discussion paper on northern water quality standards and to provide comments by December 15, 2008.

#### TIMELINE/ CHRONOLOGY

Kevin suggested that he would like to look at formatting the timeline or chronology work into a poster or posting it on the website and suggested Directors send comments on the chronology by December 19, 2008. Kevin further commented that he would like to put the information in one timeline where you can click on things and boxes open up with pictures and other relevant information including links and documents. Tim pointed out that under environmental effects he would like to see how the effect or concern was resolved in some way.

Action Item #11 – Directors to provide comment by December 19, 2008 on the revised timeline and chronology work.

Action Item #12 –Kevin to investigate costing of the timeline and chronology work for



production of a poster and posting to the Agency's website.

#### OUTSIDE REVIEW OF AGENCY

The Agency understands that DIAND and BHPB are prepared to split the cost of this work but no paperwork has been received at this point. Kevin stated that he would like to get a request for proposal out before Christmas.

Action Item #13 – Kevin is to contact Lionel Marcinkoski, DIAND regarding funding for the external review and to proceed with a request for proposal.

#### BHPB PIGEON STREAM HABITAT COMPENSATION PLAN

Given that the deadline for comments on this work has passed and that DFO has expertise actively engaged on this matter, the Directors decided there was no need for the Agency to comment at this time.

#### OPERATIONAL POLICY STATEMENT FOR ADAPTIVE MANAGEMENT MEASURES UNDER THE *CANADIAN ENVIRONMENTAL ASSESSMENT ACT*

Kevin stated that Lionel Marcinkoski of DIAND sent this document and there is a reference to the Agency by CEAA. Kevin suggested that if there are any comments to forward them to him. After discussion it was decided that the Agency would not comment on this.

#### McCRANK REPORT

The Agency received a copy of the report by the DIAND Minister's Special Representative on the Northern Regulatory Reform Initiative with a covering letter from the Minister inviting comments. Kevin disclosed that he had helped conduct a review of the McCrank report for another non-profit organization.

It was decided that the Agency should comment on the report because it did not recognize the importance of capacity building and participant funding to promote Aboriginal involvement in resource management.

Action Item #14 – Staff to draft a letter of comment on the McCrank report for review and approval by the Directors.

#### OTHER BUSINESS

Tim is to put course workbook on ligand models in the Agency library that he obtained at a recent workshop.

Laura indicated that she would like a hard copy of the LLCF Water Quality Prediction Models 1 and 2.

Action Item #15 – Scott to provide Laura with a hard copy of the LLCF Water Quality Model reports.

Tim suggested that the Agency obtain copies of a couple of publications regarding the toxicity of various contaminants to biota.

Action Item #16 – Scott to locate copies of these publications for the Agency library.

Kevin mentioned that the distribution of the monthly SNP results appears to have changed and asked whether Directors would like to continue to receive this data. Tim, Laura, and Tony would like to receive these reports.

Action Item #17 – Scott to forward SNP monthly reports to Tim, Laura and Tony.

#### NEXT MEETING DATES

January 13-15, 2009 for next Board meeting.

March 30-April 1, 2009 for another Board meeting.

May 5-7, 2009 for the Annual Report writing session on Mayne Island.

Action Item #18 – Tony to check availability of Lighthouse on Mayne Island as the meeting venue and the Blue Vista for accommodation.

#### MEETING ADJOURNED

Summary of Discussion Approved by

Jaida Ohokannoak, Secretary Treasurer.