# Independent Environmental Monitoring Agency 65<sup>th</sup> Meeting of the Board of Directors Ekati Mine Site and Yellowknife, NWT June 15<sup>th</sup> – 18<sup>th</sup>, 2009 Summary of Discussion

Revised:	June 18 <sup>th</sup> , 2009

DirectorsGuestsTim ByersRobert Jenkins, DIANDAudrey EngeCarole Mills, DIAND

Laura Johnston Susan Fleck, GNWT-ENR

Jaida Ohokannoak Chervahun Emilien, MacKay LLP
Tony Pearse (by teleconference) Gavin Fitch, McLennan Ross (by teleconference)

Tony Pearse (by teleconference) Gavin Fitch, McLennan Ross Kim Poole Kathy Racher, WLWB

Bill Ross

Staff

Scott Duguid Kevin O'Reilly

The Agency Board meeting involved a session starting on the evening of June 15 to discuss water quality standards. The Directors and staff visited the Ekati mine site on June 16 and 17 and viewed the following facilities and features:

- Fox Pit:
- Cell B and the Fay Lake spill remediation (Jute material and some sandbags have been placed over the length of the eastern spill track used for the emergency road and silt curtain deployment along the spill inflow at Fay Lake. The road has been completed all the around Cell B and a liner is being placed beneath the kimberlite to the berm edge inside Cell B.);
- Revegetation plots on top of the Panda-Koala-Beartooth waste rock pile;
- High-volume air sampler at Grizzly Lake;
- Dustfall monitoring gauges at the end of the airstrip near the old camp;
- Continuous air quality monitoring building and equipment at the new location near the emulsion plant; and
- Environment Department offices and lab.

David Abernethy and Jamie Steele accompanied the Agency delegation during our tour. The Agency conducted part of its business meeting at the mine site and also reviewed a proof of its 2008-09 Annual Report, before returning to Yellowknife.

#### AGENCY BUSINESS

#### <u>Information Updates</u>

Bill – Will represent the Agency at the August 25-28, 2009 Environmental Agreement implementation meeting.

Tim – Agency Annual Report writing and reviewed Brenda Parlee's literature review for DIAND to better document Traditional Knowledge (TK) use in water management to help improve the Aquatic Effects Monitoring Program (AEMP) Guidelines.

Laura – Dealt with review of the draft amalgamated water licence. She commented that it looks like the air monitoring requirement will be removed from the Surveillance Network Program (SNP) of the licence.

Jaida – Attended the Environmental Impact Review (EIR) sessions in Yellowknife on air quality and wildlife. She also worked on financial statements and the DIAND-lead AEMP guidelines with the use of TK.

Audrey – Intends to do some background reading on the mine over the summer and hopes to do some further work on her Master's studies.

Kim – Attended the EIR wildlife session and the diamond mine wildlife monitoring meeting on June 15. He advised of the potential workshop on September 21-23, 2009 where there would be a longer term and more inclusive review of the diamond mine wildlife monitoring programs.

Kevin- Spent time getting ready for and assisting with the audit. He prepared the chronological table on pit lake restoration as found in the public record to assist with the submission from the Agency in response to BHPB's motion challenging the jurisdiction of the Wek'eezhii Land and Water Board (WLWB). The SENES Consulting external review of the Agency was distributed to the Society members. The Agency intervention on the Interim Closure and Reclamation Plan (ICRP) was completed and submitted. Assisted with edits and Annual Report preparation, and attended portions of the EIR sessions. The performance evaluation of the Environmental Analyst was also completed.

Scott- Annual report preparation and editing, review of some reports, and attendance at the EIR sessions.

#### **Finances**

Chervahun Emilien from Mackay LLP attended a portion of the Agency's Board meeting to assist with the review of the draft financial statements.

The draft financial statements for 2008-09 were approved subject to further clarification on a few items including reporting of expenses allocated to the Separate Fund and the presentation of the General Operation Fund.

Motion to Approve the 2008-09 Financial Statements

Moved by: Bill Ross Seconded by: Kim Poole Approved with no objections.

Action Item #1 Jaida and Kevin to seek further clarification from the auditors and arrange for the final version of the Financial Statements for 2008-09.

There was a discussion regarding calculation of travel and work time while on Agency business. For greater clarity, it was decided that there is a maximum of 7.5 hours to be billed for travel in any one day while on Agency business, no matter the actual amount of time spent travelling. Any work performed after travel or on any other day, should be claimed at the actual number of hours spent on Agency business.

Kevin suggested that the Agency policy on claims be adjusted accordingly and to make it more explicit, by using examples.

Action Item #2 Kevin to adjust the Agency Policy on Honouraria and Travel claims to provide clarification on travel and work reimbursement calculations.

The Manager's laptop computer is not functioning up to par and it is now over five years old. Kevin was given permission by the Directors to purchase a new laptop if the current one cannot be fixed.

Action Item #3 Kevin to look into repair or purchase of laptop.

#### Risk Management Plan

Jaida provided the Directors with an overview of a draft Risk Management Plan, including the inputs and an explanation of how the document was created. Kevin added that he borrowed the Enterprise Wide Risk Management methodology from the most recent version of the BHPB ICRP where there is an appendix that assesses risk. Risk is evaluated in terms of identification of certain threats and assessing the severity, exposure and probability, to rank and rate the residual risk. The Plan is a subjective tool to identify areas for improvement in the management of risk and to set a timeline for such changes.

The Directors suggested a number of wording changes along with some adjustments of the ranking and rating of individual threats or risks. With the suggested changes, the Directors were satisfied that risks for the Agency are at an acceptable level with appropriate follow-up on the items identified in the Plan.

Action Item #4 Kevin to adjust the Agency Risk Management Plan based on the input from Directors.

Motion to Approve the Risk Management Plan as an internal planning document, as amended

Moved by: Kim Poole Seconded by: Tim Byers Approved with no objections.

## Agency Annual Report

There was a discussion regarding the timing of the Agency Annual Report writing session and the production constraints. There has been some difficulty in properly reviewing and reporting on the AEMP in particular as its release date is too close to the writing session. It was suggested that the report writing session should take place in late May or early June, to allow for better review of documents and take the pressure off the revisions.

The staff offered the following observations. The Agency could attempt to change the year-end that is set in the by-laws as March 31 to a later date but this would not coincide with most others' financial year. There is no set date for the Annual General Meeting but holding it any later in the year than the Agency's usual practice of October or November would make the material being covered rather stale. The Agency is constrained by the timing of the AGM, the time it takes to produce the Annual Report, and the availability of both staff and the Directors over the summer months to conclude the writing and production.

The Directors agreed that next year's Annual Report writing session should be moved back one week to May 10-14, 2010 to allow more time for a review of the 2009 AEMP. It was also suggested that staff discuss with Outcrop a means to do direct editing to the Annual Report content rather than use numerous paper proofs.

Action Item #5 The Agency's 2009-10 Annual Report writing session is scheduled for the week of May 10-14, 2010 with a location to be determined later.

Action Item #6 Agency staff to discuss with Outcrop the possibility of direct editing on the content of the Agency's Annual Report.

Jaida and Tim offered to assist with the writing and editing of the plain language version of the Agency's 2008-09 Annual Report.

Action Item #7 Staff to begin working on the plain language version of the 2008-09 Annual Report with the assistance of Directors where appropriate and necessary.

## Conference Call Legal Counsel

An in-camera session teleconference was held regarding the Agency's participation on the public hearing on BHPB's motion to the WLWB regarding its jurisdiction over fish and fish habitat. The teleconference participants included all Directors (with Tony Pearse also on the line), staff and the Agency's legal counsel, Gavin Fitch.

Gavin will come up to Yellowknife on the July 14 for the hearing the next day, and will meet with Bill, Tony and Kevin to discuss the oral argument.

#### **Agency Timeline Project**

The prototype website was reviewed. There was a suggestion to link the main events from the home page. The prototype will also be shown to BHPB, DIAND and GNWT at the Environmental Agreement implementation meeting on June 19, 2009.

#### **Upcoming Meetings**

Audrey reported on some discussions she had with NSMA representatives. As the NSMA had a workshop on the Ekati mine in March 2009 where the Agency Manager made a presentation, it was felt that it would be better to plan a Board meeting with the NSMA in 2010. Kevin suggested that the Agency has never been to the communities of Whati or Gameti and that Board meeting in one of those communities this fall might be a good idea. Bill suggested going to Kugluktuk was another possibility. The Directors proposed that Kevin and Jaida investigate interest in the communities about holding the next Agency Board meeting there as scheduled for September 29, 30 and October 1, 2009.

Action Item #8 Kevin and Jaida to canvass communities regarding the possibility of an Agency Board meeting and visit in September 2009.

It was agreed that the Agency should contact the Society members about holding the Annual General Meeting on November 19, 2009 with a Board meeting the preceding day. SENES has agreed to come to the AGM to present the external review report and to facilitate a discussion with the Society members. Kevin will confirm the dates with SENES.

Kevin to send a message to society members to gauge whether there may be any conflicts and to indicate that there may be a session in the afternoon for the Aboriginal Society members.

Action Item #9 Kevin to send message to Aboriginal Society members and SENES with the proposed AGM date.

There was a discussion regarding the date change for the Environmental Impact Report site visit. The new dates are August 25-28, 2009. Bill indicated he will be available and interested in going. Audrey would also like to attend with Kevin as an alternate.

Tim will send his comments on the EIR and the aquatic technical session he attended.

Action Item #10 Kevin to advise BHPB that Bill and Audrey (with Kevin as an alternate) to participate in the EIR site visit in August 2009.

#### **MEETINGS WITH GUESTS**

<u>Discussion of Water Quality Standards—Robert Jenkins (DIAND), Carole Mills (DIAND) and Kathy Racher (WLWB)</u>

The meeting was intended to provide an update for the Directors on the on-going work to establish water quality standards for the NWT and how they might be applied to the Ekati diamond mine. The Agency was also seeking some assurance that the efforts were being coordinated in some fashion.

Kathy stated that in 2005 there was an Auditor General's report that recommended DIAND should come up with Water Quality Standards for the NWT in the interest of regulatory certainty. Land and water boards dealt with water quality and effluent discharges on a case-by-case basis. DIAND saw three options: 1) sectoral or industry-specific standard based on best available technology; 2) specific water quality objectives for watersheds or individual water bodies based on a number of factors including assimilative capacity; or 3) develop a policy framework and procedure for site-specific water quality standards. DIAND commissioned Don MacDonald to look into the issue and he recommended the third option.

After Kathy left DIAND and joined the WLWB staff, the Mackenzie Valley Land and Water Board established a number of working groups in January 2008 to provide greater clarity and consistency. Kathy is chair of Water Quality Standards working group which is working towards a policy framework and procedure for developing effluent quality criteria. DIAND decided to leave the work on water quality standards to the Boards as it is the Boards that will have to implement the standards through individual water licences. The Boards decided not to invite outside representation on the working groups, but there will be opportunities for public and government agency comment. There should not be any surprises as the working groups in many cases are simply documenting current practices. To date there is a draft policy guiding principles and factors to consider in setting EQCs. Once these are reviewed and approved, there will be a need to further guideline documents which will be used for implementation (e.g. initial dilution zones, effluent characterization). The full MVLWB is expected to meet in early September 2009 where the draft EQC policy papers will be reviewed and if approved, circulated for public input. The intention is to have this material finalized by the end of the calendar year.

Robert explained that DIAND sent out the Don McDonald discussion paper which set out the three options, and recommended third option of a policy framework and procedure for setting site-specific EQCs. No objections were received to the third option. DIAND is also developing some water quality objectives in the context of transboundary efforts with the Mackenzie River Basin Board. This experience will be documented and shared with the MVWLB and its working groups. Due to funding constraints, no direct work will be done to develop WQOs or water quality standards for the NWT in this fiscal year.

Carole Mills stated that DIAND and the Land and Water Boards are working from the same documents, so it does not make sense to duplicate efforts. She explained that the Water Resources Division of DIAND is working on a transboundry water agreement with Alberta which is to be in place by 2011 or 2012. She further explained that DIAND is looking toward WQOs as opposed to firm discharge limits and is looking for continuous improvement. Carole then advised that due to fiscal limitations there may be fewer consultants involved in review of documents and more reliance on working together with the boards as the priority is on transboundary issues.

The Directors agreed that the December 2009 timeline for release of a policy framework and procedures for EQCs would be in line with the Agency's recommendation in the forthcoming Annual Report.

Kevin asked how the policy and procedures being developed by the MVLWB would be applied in the context of a water licence renewal for BHPB. Kathy responded, that if there is any evidence that the EQC in the licence are not protective then those will be up for review and consideration for changes. She reminded the Agency that anyone can bring forward new information at almost any time and ask the Board to review it to change a licence term or condition and the Board can then rule on the matter.

Kevin asked Carole for clarification about the allocation funds within DIAND for the NWT region to continue work on the diamond projects. Carole informed the Agency that the funds were allocated to the diamond valuation and economic development side rather than to the regulatory work as had been the practice in the past. The only funds that the Water Division has are for core operations with no additional travel or money for consultants.

The Directors asked Carole how the Agency could be of assistance to DIAND. Carole suggested that the best means of assistance is by helping DIAND set priorities. Carole further committed that DIAND will continue to work on inclusion of TK in the development of AEMP's on internally reallocated funds.

Kevin asked Kathy about the status of the BHPB Watershed Adaptive Management Plan. Kathy replied that one of the working groups through the MVLWB is working on guidelines for adaptive management should be out for review before the end of summer 2009.

#### Fisheries and Oceans Update—Bruce Hanna

Bruce Hanna attended the meeting to discuss what role the Agency might play with regard to the fisheries habitat compensation fund set up as a result of the BHPB mine. It was suggested that the Agency could play an advisory role in the disposition of the funds or in reviewing applications for habitat projects or research. There was the discussion by the Directors, who advised Bruce that they do not want to take over administration of the fund but are willing to play an advisory role. The Agency had made a similar offer in the past and the position is to still support the use of the funds as an advisor.

Bruce mentioned that DFO may be looking at some internal reorganization to a watershed based approach to fisheries management. Staff will still be assigned to specific files but will also look at things on a bigger scale, by watershed.

Bruce updated the directors on a new study involving acute toxicity testing of northern fish species which will be done by the Ontario Ministry of Environment through a lab in Etobicoke, and University of Guelph will provide the masters program student. The diamond mines are helping to fund this work that will involve arctic char, grayling and round whitefish. Bruce will send details on the study.

#### Environmental Monitoring Advisory Board (EMAB) Update—John McCullum

John spoke about the financial dispute that EMAB is having with Diavik. He said that EMAB has funds in the bank, but Diavik provided \$150k less than requested. Diavik requested that EMAB shut down its office during the time the mine is temporarily closed this summer and around Christmas 2009. EMAB disagreed with the request by Diavik to close its office during the mine shut down. As a result, Diavik has now written the DIAND Minister pursuant to the Environmental Agreement, requesting relief from its obligations under the Agreement. Diavik has assured EMAB that the intended shutdown will not affect the environmental programs and monitoring at the mine.

Diavik closure planning is proceeding well along a path set out by the WLWB. There may have to be some review of the objectives as discussed at the Diavik-run options workshop. The WLWB does not plan to have a public hearing on the closure plan. EMAB has suggested that Diavik go to communities for further input into closure objectives and options. The draft plan is due August 1, 2009.

Diavik's 2008 WEMP and AEMP reports were submitted on April 30, 2009, later than required. EMAB has reviewed the WEMP and there are no real concerns. Most of the discussion surrounded changes to the WEMP, and the Wildlife Research Permit Application. EMAB was not happy with what happened with revisions to the WEMP last year, as there was short notice and a lack of consultation. EMAB wrote to GNWT-ENR regarding the changes proposed in the Wildlife Research Permit Application but it was approved anyway.

Diavik was able to complete the 2008 AEMP sampling. Several early warning effects were identified including metals accumulation, particularly mercury in slimy sculpins by the discharge point into Lac de Gras. Higher levels of mercury were also found in lake trout but the fish were older and bigger. Over 20% of the area of Lac de Gras is showing signs of eutrophication (elevated phosphorus and chlorophyll). When asked by the Agency, John replied that there was no evidence of hydrocarbon metabolites in the fish sampled by Diavik but this was not tested for either.

EMAB is monitoring seepage from a couple of ponds and the processed kimberlite containment area (PKCA). John advised that there is some seepage getting into Lac de Gras from one of the leaks (approximately 260 cubic metres), and the levels of contaminants detected were over the licence limits. The DIAND inspector and DFO have been involved but no charges are likely to be laid.

EMAB has formally endorsed the environmental monitoring using TK proposal that came out of the March 2009 Kugluktuk workshop. There was concern from the Diavik representative concerning safety and liability at the TK camps. No funding has been secured and initial enquiries to BHPB have been made and there was some support expressed for the idea.

Kim mentioned that he had done the calculations of the extra flying time if caribou aerial survey boundaries were extended to those completed by Diavik last year (approximately 20 extra minutes per survey) and with a larger rectangular boundary on the south side (approximately 37 extra minutes per survey).

#### Snap Lake Environmental Monitoring Agency (SLEMA) Update—Dave White

SLEMA has looked into ammonium nitrate storage at Snap Lake due to higher levels of nitrates in the sumps surrounding the area where bags are currently stockpiled.

DeBeers appears to have reduced its participation in the diamond mine wildlife monitoring review now underway. Dave reported on a workshop with DeBeers on TK involvement in wildlife monitoring and there were some helpful discussions. There will be some behavioural observation work and some faecal pellet analysis in the upcoming monitoring season. DeBeers will also carry out dust fall monitoring along a couple of transects. SLEMA will submit a proposal to DeBeers in August which will involve a one week camp near the mine site. Dave will send the proposal to the Agency when it is completed. The Agency will share the BHPB air quality management and monitoring plan and 2008 monitoring report with SLEMA.

Action Item #11 Kevin send the Ekati Air Quality Management and Monitoring Plan to SLEMA, the 2008 Air Quality Monitoring Program report when it is available, and contact information for Katherine Enns.

Anne Gunn is currently reviewing the 2008 Snap Lake WEMP report for SLEMA. SLEMA is attempting to get Barry Zadjlik to do a review of the 2008 AEMP. DeBeers is

doing a fish health study this summer, and Dave will recommend hydrocarbon metabolites be included for any analysis. The Agency will share the BHPB special study on Cell E fish when it is available.

# Government of the Northwest Territories-Environment and Natural Resources (ENR) Update—Sue Fleck

There was a discussion with regard to the Agency's recommendation, in the forthcoming Annual Report, on the role of ENR in the ongoing review of the diamond mine review. Susan agreed with a change such that ENR should "coordinate" rather than "direct" the review.

Sue reported that ENR is planning a workshop on September 22-23, 2009 as part of the diamond mine wildlife monitoring program review. Representatives from ENR staff, the diamond mines, monitoring agencies and the communities will all be invited. The focus of the workshop is to look at the overall objectives for the programs, study designs, results and any gaps. There will be topics such as caribou and Traditional Knowledge, wolverine, bears and birds. On August 5 ENR will have a planning session to go over the reviews of the WEMP results that are being prepared by each of the mines in preparation for the September workshop. The intent is to come up with a report that includes responses from the diamond mines, not simply recommendations. ENR's interests are in developing standardized protocols and minimum standards that will also assist with cumulative effects assessment. The mines suggested that it be a technical session. Sue proposed that the mines or the Boards identify knowledgeable community people to participate in the workshop rather than start from scratch. Sue stated she would look at the Environmental Agreements to see if there is anything about community involvement in design of monitoring programs.

Susan reported that ENR is going to look at the recently released EIRs to determine if the predicted impacts occurred, and also to see if the current mitigation is working to address any of the impacts.

The Agency offered to assist in helping with the organization of the workshop, and that the Wek'eezhii Renewable Resources Board might also be invited to attend the workshop. There was also a discussion of potential facilitators for the workshop.

MEETING TERMINATED at 4:30 pm

Summary of Discussion Approved by Jaida Ohokannoak, Secretary Treasurer.