

**Independent Environmental Monitoring Agency
18th Meeting of the Board of Directors
Yellowknife, Northwest Territories**

March 31st to April 2nd, 2000

Summary of Discussion

Directors

Red Pedersen	Tony Pearse
Bill Ross	Peter McCart
François Messier	

Staff

Alex Thomson	John Holman
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Absent

Fikret Berkes

Friday March 31st, 2000, 10 a.m.

The **Chair** opened the meeting by reviewing the agenda. No additions were made. The approval of the summary of discussion was moved in the agenda to April 1st. Fish Habitat Compensation Funding was moved to March 31st.

Information Updates

The **Chair** was interviewed by the MacLeod Institute and attended the Nunavut Water Board pre-hearing community meeting on the Jericho project.

The **Treasurer** oversaw year-end expenditures to ensure the Agency stayed within budget. His interview with the McLeod Institute as part of the evaluation went well, and he provided feedback to BHP on grizzly bear management. A copy of that report will be given to the directors.

Tony Pearse had a good interview with the McLeod Institute.

Bill Ross delivered a cumulative effects course at the Banff Centre of Management, and was asked by Environment Canada to present a paper on the Monitoring Agency at the International Association of Impact Assessments conference in Hong Kong.

Alexandra Thomson referred the board to the staff update in the package. She relayed information from the last Inter-Agency Coordinating Team (IACT) meetings regarding inspection reports, the response from the Department of Fisheries and Oceans (DFO) on King Pond, and the seepage survey. A meeting between BHP, regulators, and the Agency is tentatively suggested for April 28th.

John Holman reported that he has converted the resource library inventory from Excel into Access; participated in Windows Operating System and Access courses, as well as attended the Banff Centre of Management's *Building Better Cumulative Effects Assessments*.

Business Arising from Last Meeting

Alexandra asked for clarification on Action Item 11 from the last meeting in reference to archeological sites. **Directors** confirmed that sensitive site information in archeological reports must not be copied, but the front covers and middle information can be placed into the public registry. This information should be integrated into the recommendations tracking system.

Per Action Item 16, the Surveillance Monitoring Program (SMP) map is on its way to the office from BHP.

Outstanding action: Obtain winter water quality data for Pete.

Financial Report:

The **treasurer** reported that there is a budget carryover of \$15,000-20,000. Capital items were summarized and it was clarified that communications must be rolled into the community consultation section. Computer upgrades have occurred for the Communications Administrator and will proceed for the Manager.

The meeting adjourned at 11:30 a.m.

- LUNCH -

The meeting resumed at 1:20 p.m.

Discussion on Questions for Presenters

The board discussed the creation of the Mackenzie Valley Land and Water Board (MVLWB) and possible questions for executive director Ken Weagle, and Greg Cook, the new contact replacing Marie Adams within the Department of Indian Affairs and Northern Development (DIAND).

Directors discussed the enforcement provisions for the MVLWB. Clarification must be sought on the issuance of Class "A" and Class "B" water licenses and the corresponding levels of public input and review.

Fish Habitat Compensation Fund

The Department of Fisheries and Oceans (DFO) sent the summary of the January 26th meeting of the FHCF advisory committee, and an accounting of expenditures to January 25th, 2000.

Action Item 1: Obtain a copy of the FHCF Request for Proposals and distribute it to the directors. Invite DFO to the next directors' meeting to provide an update of the Fish Habitat Compensation Fund, April 26th, 2000 in Yellowknife.

Ken Weagle, MVLWB, arrived at 2:05 p.m.

Mackenzie Valley Land and Water Board

Ken Weagle introduced the MVLWB by saying that it was operational as of March 31st, 2000, under the Mackenzie Valley Resource Management Act (MVRMA). The main MVLWB will deal with projects that are trans-boundary in nature. Sub-panels in each settled and unsettled land claim areas will examine permits and licenses that affect their regions (Gwich'in, Sahtu, Deh Cho, North Slave and South Slave areas). The MVLWB chair appoints the panel to deal with specific applications. Each panel will have three or more representatives, and comprise of regional representation. The MVLWB chair signs the final permit or license. Water licenses are issued for five years. The MVLWB would like to add monitoring to the licenses and permits, feeling that it is within the mandate of the legislation.

The board has received four applications as of March 31st, 2000, and expects to receive approximately 200 applications per year. The DIAND Minister will appoint Nunavut representatives to regional panels addressing trans-boundary concerns that overlap with Nunavut territory.

Albert Van Roodselaar is the in-house Technical Advisor and chairs the Technical Advisory Committee (TAC). TAC will consist of project-specific appointees, providing expertise on the technical views of regulatory matters. It will concentrate on acquiring more detailed project descriptions than previously accepted, better definition of impacts, disturbances and associated mitigation, as well as improved community consultations.

Directors asked about the amending process to an existing Class "A" license.

Ken Weagle replied that preliminary assessment could show the MVLWB whether it should be regulated or have a public hearing.

Directors asked about how can the Agency be involved in the review of information and screening of proposed BHP projects?

Ken Weagle said that the Agency would have to added to the reviewer's list of BHP permits or licence applications. The Agency must forward its address, and it can begin to receive information as a reviewer.

Directors asked that if the Agency identifies an issue in the permit or license and want to bring it to the Board's attention, how does it achieve this?

Ken Weagle replied that the Agency can make recommendations to the Board, and will be given consideration in lieu of its role under the Environmental Agreement.

Action Item 2: Write to MVLWB advising it that the Agency wants to be on the review Committee for BHP licensing and permitting.

Introduction of Greg Cook, the new DIAND contact

The Beartooth, Pigeon and Sable Extension project was discussed. If the Agency copies DIAND its comments on the development, the department will consider them in its submission to MVERIB.

In regards to the seepage study meeting, DIAND Enforcement Officer Darren Unrau will respond to the issue.

Directors asked if the Surveillance Network Program data is analyzed at Taiga labs.

Greg Cook said yes. Officer Unrau can gather his own water samples during inspections that may duplicate SNP Monitoring Station results, and is considered as extra data. BHP uses EnviroTest labs.

Directors pointed out that Taiga seems to have a high detection limit, such as the copper detection limits coinciding with guideline levels set by the Canadian Council of the Ministers of the Environment (CCME).

Greg Cook said that Darren Unrau is the DIAND person who usually reviews the SNP data. DIAND has an agreement to continue providing enforcement services to MVEIRB. Environment Canada receives copies of any spill reports.

Directors pointed out that trend analysis is not being applied to the monitoring data to identify potential problems down the road. It is advisable that focus be placed on identifying trends and managing impacts on the Coppermine basin.

Sable, Pigeon, Beartooth Extension Projects: EA including Comprehensive Report

The impact assessment has yet to be submitted. MVEIRB has six months to assess the document.

Directors commented on the incremental approval approach BHP is taking to the Environmental Assessment, in response to MVEIRB.

Report from Pete McCart on Metal Concentrations

Pete McCart pointed out that copper activity in the water column is very complicated. Metals have increased in the pit and in snow samples. The variability in data is not big enough to show effects – and may have been due to the time of year when they were sampled. Pete's conclusion is to mention metal in the annual report in passing. Copper levels are higher in winter under winter ice. There is a need to acquire more data for winter and fall water circulation. Mud water causes copper to decomplex and become insoluble in winter when oxygen levels are low. The copper source is unknown. A combination of low pH and the solubility leads to greater concentrations that exceed CCME guidelines for copper in

Kodiak Lake (It increases by more than a factor of two in winter compared to summer). It meets or exceeds the guideline at Long Lake. Historical data is required to show whether it was a natural pattern or a developing problem. Metal levels in BHP snow core results should be examined.

Beartooth and Bearclaw may have been affected by the diversion ditch construction. The copper coming into Panda also exceeds CCME guidelines, and there are too many extreme values to detect trends. Mercury doesn't seem to be a problem. The data needs to be reviewed according to this information. Metals must be discussed in detail with BHP before putting in annual report.

Adjourned for the day, 5:30 p.m.

Saturday - April 1st, 2000; 8:35 a.m.

Directors continued to discuss questions for John Wittemann:

- WEMP.
- Vegetation studies.
- Response to Dr. Kevin Morin's report.
- Format of the meeting on April 28th, 2000.
- The BHP staff authors should sign the company reports. This goes back to the requirements of quality control, and ensuring that the data is scientifically defensible.
- The early warning signals for higher concentrations of copper and nitrates, for example, such as Slipper Lake and a small bay on Lac de Gras should be taken into consideration. It could be a big problem in the future.
- The new studies that EBA Engineering said that they would gather on Long Lake.

BHP

John Wittemann reported that BHP is expanding its truck shop and truck warming shed. Another nine-million-litre fuel tank is being constructed in the tank farm and the berm will be extended around it. The primary crusher will be sold; it has been a problem because the high moisture in the frozen kimberlite hinders processing. The new crusher will be roller-driven, is on-site and will be installed in June or July 2000. BHP has to schedule a five-day shutdown to install it. Currently there is about 75,000 tonnes in the sizer to allow operations to continue. Nuna Logistics has begun pre-stripping Koala North. The winter road is still fairly good. The wolverine survey has not been completed – snow tracking has not been done.

It was pointed out by the Agency that the wolverine tracking should begin as soon as possible before the snow melts in order to ensure proper data collection of the wolverine's activities in proximity of the mine.

The Misery land lease extension has been granted. Nuna Logistics is contracted do the pre-stripping and installation of an eight-million litre tank at Misery Lake in June. Department of

Fisheries and Oceans has not yet responded to BHP's letter requesting that King Pond not be declared a fish habitat. Desperation and Carrie Lake are also going to be covered over by the Misery development. In February 2001, BHP will be processing 750 tonnes per day. Regarding the Fox amendment, BHP will respond to the Technical Advisory Committee's request for more information.

The **directors** are uncomfortable over the lack of information being released on habitat loss due to mine development, reclamation techniques, and quality of vegetation due to dust effects or other mining activities.

John Witteman replied that BHP staff have met to discuss reclamation and are being cautious. Harvey Martins in Calgary will be contracted to conduct studies similar to his work in Russia. Kimberlite geochemistry is being examined, and it is anticipated that salts may pose a problem for plant growth. Vegetation studies were done in relation to sulphur dioxide and nitrous oxide. More work is required before the results can be released at the preliminary stage.

The **directors** expressed concern over dust and its effects on vegetation – and the secondary effects on caribou. They also pointed out that all this new information should have been in the 1999 Annual Report on the Environmental Agreement. Habitat is a specific Valued Ecosystem Component (VEC) in WEMP, and more information is needed on it. The next stage after getting this report is to examine the habitat through aerial photography and other methods.

The Agency will submit its comments on both the AEMP and WEMP. BHP acknowledges that the WEMP was deficient and the work is going to be tendered to another firm. The contract has yet to be awarded.

With respect to the seepage meeting the Agency suggested that BHP present its information first, the Agency present second, and the regulators present afterwards, with a question period to follow. BHP is in agreement and will circulate any additional information before the meeting.

Directors pointed out that air quality data seems flawed in that the means and standard variances in the tables are the same. It could be as a result of weak analysis. Sample sites should be based upon the winter windrows and distance.

BHP took note of the error and will rectify the situation. The directors suggested that more experienced scientists work with the junior researchers.

Directors requested available winter water quality data.

BHP has had difficulties getting samples in cold weather. They have developed winter sampling techniques and will increase the frequency of data collection.

Chris Hanks reported that the Environmental Assessment document is nearly complete and will be released in April.

Directors asked if the contributors to the Environmental Assessment are going to be identified in the report.

The team of authors would be identified and will be available to discuss its contents in a public forum. Documenting traditional use may pose some conflicts.

Lorraine Catholique was the only person who was able to meet with BHP as part of the Traditional Knowledge Working Group.

The Inuit Traditional Knowledge project is nearing a reporting stage. The interviews are complete, and the data is being pulled together for a final report later this year. The Kitikmeot Inuit Association is continuing work on its GIS project.

Elders will be on-site in May for caribou monitoring.

Summary of Discussion

Action Item #2: Purchase a tape recorder for use during the meetings for reference on technical details.

- LUNCH -

Fikret Berkes joined the meeting via a conference call at 1:05 p.m.

Directors updated **Fikret Berkes** on the discussions of the meeting to date. On the topic of community-based monitoring, qualitative or quantitative results are needed to make BHP's efforts more useful. A system of documentation should be in place to show what the elders observed, their recommendations, and its integration into adaptive management systems at BHP.

Action Item #3: Board authorization is given to let a contract with Kevin Morin to prepare for the April 28th meeting, as well as to pay his fee up to \$7,000 and all expenses.

Action Item #4: Board authorization is given to purchase the chairs, promotional items, and computer upgrade.

Fikret Berkes departed at 1:37 p.m.

AEMP & WEMP letters

A draft letter was circulated and amended. A paragraph must be added in the AEMP and WEMP letter outlining the need to document the Elders site visits. The water quality data should include Kodiak Lake, which has been left out of the AEMP report. A comparable data set from Kodiak Lake should be pulled out to fill this information gap.

Action Item #5: Send a letter to append François Messier's comments on WEMP.

Fox Dewatering

Regulators have expressed the need for more information before the TAC screening can be completed.

Fish Habitat Compensation Fund

Action Item #6: The Agency must acquire DFO's Request for Proposals, and the criteria.

Preparation to Review BHP's Annual Report and OEMP, the environmental assessment document for Beartooth, Pigeon & Sable

The Agency has 45 days under the Environmental Agreement to identify deficiencies in the 1999 Annual Report. It was suggested that the Directors review BHP's Annual Report with the drafting of the Agency's annual report in mind. The section drafts of the annual report must be in the office by April 17th, 2000.

Action Item #5: Directors will review the Annual Report of the 1999 Environmental Agreement and Water Licence and will bring their comments to the Annual Report drafting session. Comments will be collated for May 15th deadline.

Meeting adjourned for the day, 2:26 p.m.

DAY 3: Sunday April 2nd, 2000; Yellowknife 9:05 a.m.

Evaluation

Allan Legge, Elaine McCoy, and Fikret Berkes joined the meeting via a telephone conference call. The MacLeod Institute presented their findings and draft document based on consultation with the Agency's manager. The evaluation focused on program design: The Basic Program Model outlines the Agency's outputs and outcomes. The institute requested directors' input in order to ensure the context of the evaluation is consistent with the Agency's activities.

The **directors** suggested the following changes:

Remove "publish" from the top outputs box in Figure 2.

Per Public and Aboriginal Involvement Programs, **directors** pointed out that the Annual Report does not seem to be included in the outputs. **Elaine** replied that there was no space.

Directors said that "early intervention" is missing from Figure 2, and suggested that this could be added to the first box on the left in Monitoring and Reviewing (Watchdog).

The MacLeod Institute will amend the figure and submit a final document by April 17th,

2000. The directors will circulate it to Society Members and make it available to the public, as well as present its findings at the Annual General Meeting. The MacLeod Institute suggested that a strategic planning session could be useful.

Action Item #7: Make 100 copies of the final report and distribute to each person interviewed. Send out before the AGM. The directors must discuss a strategic plan and possible priorities of a workplan at the drafting session, April 26th to 28th, 2000.

Annual General Meeting

Quorum bylaws must be examined and brought up with Society Members.

Action Item #8: The AGM will be held at the end of June.

Fikret Berkes approved amendments to the AEMP and WEMP letter, and had no comments on human resources.

Any necessary setting of priorities and work plan will occur after the Agency has received the input of Society Members at the AGM. Suggested discussion items include

- The Extension and other project proposals will increase the workload;
- More meetings on the role of the Agency with society members are required. They appreciated meeting the directors in the last AGM;
- The Agency must develop a new approach for funding negotiations with BHP, and;
- The annual report could include a work plan that ranks activities according to priority. The finances are shown in a financial statement and a proposed budget.

Communications Newsletter

Action Item #9: Complete the newsletter and send it to the directors for review, if no responses are received within a week then proceed with publishing.

Action Item #10: Use the logo which is consistent with the Agency sign.

Draft Human Resource Policy

The **chair** pointed out that the numbers should be removed from the financial section.

The conflict of interest section has been kept for staff only.

Action Item #11: The Board of directors approved the human resource policy with minor edits.

The next meeting will be an Annual Report drafting session in Yellowknife April 26th to 27th, 2000; with April 28th reserved for the seepage survey meeting.

The meeting adjourned at 2:55 p.m.