

***Independent Environmental Monitoring Agency
28th Meeting of the Board of Directors
Yellowknife, Northwest Territories
March 24th – 26th, 2002***

Summary of Discussion

Directors

Red Pedersen	Tim Byers
Peter McCart	Bill Ross
Tony Pearse	François Messier
Bob Turner	

Staff

Zabey Nevitt	Robin Staples
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March 24th, 2002

Meeting called to order by chair at 8:30 am

Agenda reviewed and accepted.

Information Updates

Red: noted that there have not been many community meetings in Kugluktuk recently due to very cold temperatures that the community has been experiencing.

Bill: mentioned that he has been drafting a chapter on the Agency and Ekati Diamond Mine™ project for a book to which he is contributing on environmental follow-up studies. He noted that he would make the draft available to other directors for review. The focus of the chapter is on lessons learned from follow-up studies and community involvement (e.g., elder site visits and the input they provide).

Tim: noted that he did some preliminary research into the rehabilitation of winter roads as well as reclamation work on lichen habitats. In regards to lichen habitat reclamation, Tim mentioned that most of the work globally has been done in arid areas and not in the arctic.

Tony: began by noting that he has been actively following the regulatory process for the Sable, Pigeon & Beartooth applications. He aided staff in the review of information requests and responses and in the drafting of the Agency intervention to the Mackenzie Valley Land and Water Board (MVLWB) public hearing for this application. Tony noted that he had been asked by Dogrib Treaty 11 to work on the Sable intervention, but declined. In addition, he noted that the Grand Chief had asked him to meet with Dogrib Treaty 11

chiefs before the hearing to discuss outstanding issues with the Sable, Pigeon & Beartooth expansion.

Pete: noted that he has recently spent time developing a presentation on fisheries issues near Lac de Gras for a meeting with the Lutsel K'e Wildlife and Environment Committee. He is also meeting with Dogrib elders from four communities in the next couple of days to discuss fish habitat and how they may be able to modify their research proposal to take advantage of the BHPB fish compensation fund being administered by DFO. Pete mentioned that recent articles in the literature note that rehabilitation of lakes is very difficult and examples of successful habitat reclamation in lakes are limited. It would appear that DFO is asking aboriginal communities to achieve the same reclamation goals that scientists cannot guarantee.

Directors briefly discussed the fish habitat compensation fund administration and aboriginal involvement in the decision making process.

Bob: mentioned that his involvement with the Environmental Monitoring Advisory Board (EMAB) for the Diavik project is keeping him very busy. Most recently, EMAB held a workshop to discuss fish and fish habitat issues for Lac de Gras. Bob noted that during this workshop, many aboriginal members found DFO's no-net loss plans to be too restrictive and that the department appears unwilling to look at other options (e.g., flexible plan for the north).

François: noted that he also attended the meeting in Lutsel K'e, and discussed wildlife issues with the Wildlife and Environment Committee. Attendance and participation of elders was excellent and overall it was a very successful meeting. There was much feedback on caribou issues in particular (e.g., road design, caribou management). François also noted that he has provided the Agency with literature on wolverine, specifically on life histories, habitat requirements and typical densities.

Following François's update, a brief discussion took place regarding the additional impacts to caribou from other developments (e.g., outfitting camps, winter roads).

Directors also further discussed the meeting with the Lutsel K'e Wildlife and Environment Committee. It was noted that, as it was a joint meeting with EMAB (personnel and financially), the discussions were not limited to BHPB or Diavik and thus members from the Agency and EMAB had much more freedom to discuss issues of importance to the community. Joint activities are seen to be a very positive development.

Staff Update

Zabey summarized the activities of the staff since the last board meeting. Zabey went into further detail on some of the items on the staff activity report including: the Sable, Pigeon and Beartooth intervention, cost variance meetings, protected area strategy workshops, Environmental Agreement review, MVLWB water quality workshop, and drafting of the annual report.

Meeting with DIAND Inspector (Clint Ambrose)

Clint Ambrose gave an update on the inspector staffing process and his most recent inspection of BHPB. The following points were noted:

- The competition end date for applications for both inspector roles (BHPB and Diavik) is March 28th.
- A past DIAND inspector (Craig Broome) has agreed to help bring the full time inspectors up to speed on both projects when they are hired.
- Clint is still trying to get up to speed on the file and is focusing on identifying major environmental issues.
- Waste rock was observed in the land farm and he ordered BHPB to remove it and ensure the land farm liner was not damaged.
- No landfill change proposal has yet been received.
- The ammonia nitrate storage area is being tarped and monitored more carefully.
- Nero-Nema bridge construction continues and Carrie/Desperation cofferdams will commence once the MVLWB and inspector have given approval.
- For the Fox tank farm, spill berms are in place, but some spill contingencies are still not yet in place.

Following the inspector's update, the Agency directors and the inspector had a general discussion and the following was noted:

- Past inspectors have provided detailed inspection reports outlining a variety of issues (including issues such as food waste management). These reports are very useful to both the Agency and BHPB and it is important that the quality of these reports and inspections be maintained.
- Agency Directors strongly encourage DIAND to have an independent inspector present to keep BHPB and other companies on their toes and improve environmental management. Although, BHPB has been performing self-inspections, these types of inspections should not be something that DIAND comes to rely on.
- Increasing concerns of effects on vegetation from road dust require diligent monitoring and inspection. The Agency encourages inspectors to pay close attention to air quality vegetation monitoring, as this monitoring program may not be receiving enough attention (e.g., take pictures of vegetation in areas that may be affected by road dust).
- Inspectors are not generally professional engineers, and therefore rely on engineering consultants from either DIAND or MVLWB to review dam plans and diagrams (e.g., Desperation coffer dams).
- The method by which waste rock is being segregated (i.e. separating and transporting the different blasted rock within the pits to the appropriate place in the waste rock pile) is still a concern to the Agency. The DIAND inspector may want to investigate how this process works at BHPB and if it is being performed adequately.
- Agency is concerned with the overland discharge resulting from Fox dewatering activities. According to BHPB's self inspection, the ice dam that formed between Fox 2 and Fox 3 Lakes has caused overland discharge of water into Martine Lake and one-two extra metres of ice buildup in this area. BHPB monitoring and DIAND inspections

should pay close attention to this area and ensure that erosion does not occur during freshet.

- Past issues regarding food and wildlife management at BHPB and surrounding camps should be follow-up on. The Agency is interested in receiving a brief report on food management BHPB and nearby camps.

Action Item #1

Staff to follow-up on Inspector's commitment to write a brief report on food management at Ekati, and other nearby mining and exploration camps (e.g. Diavik, Lockart).

Meeting with BHP B (John Witteman, Chris Hanks, Derek Chubb)

John, Chris, and Derek provided an update on the various developments and ongoing activities at the site.

Main camp / development:

- Construction continues on the Nero-Nema bridge. This bridge is large for the crossing, as DFO officials did not want the main footing of the bridge affecting fish habitat.
- Another accommodation wing is being added (increasing capacity to approximately 600 people) and should be finished in early spring.
- Underground operations continuing at Koala North.
- Fox dewatering is continuing. The overland discharge of water to Martine Lake is expected to result in a two-week delay for plant growth due to the extra ice cover. Fox Lake will continue to be dewatered until the end of April or May. Once discharge limits can no longer be met, the remaining water in Fox Lake will be pumped to Long Lake.
- There will be a flocculent and coagulant treatment plant set up for the Fox development, similar to the one at Misery. Treated mine water from Fox will likely be discharged into cell D of Long Lake.

Action Item #2

BHPB to present details of the underground mining process at the next Agency board meeting.

General discussion on flocculent and coagulant toxicity. Agency Directors noted that, as there are concerns of toxicity and no reliable analytical techniques to measure flocculents and coagulants in the field, treated mine water should be deposited higher in Long Lake (i.e. top end of cell C) and not right against dyke D.

Misery operations:

- Increasing quantities of Misery ore are being sent to the process plant at main camp.
- The current mine plan still involves underground mining following open pit operations, although that is not certain.
- Desperation coffer dam application has not yet been approved by MVLWB and so the dam is not being built.
- Wildlife problems (e.g., wolverine) have not occurred this winter at Misery camp possibly due to improvements in food management.

- Acute toxicity work in King Pond has been performed.

Action Item #3

Staff to acquire acute toxicity work done in King Pond from BHPB or Environment Canada.

Agency Directors informed BHPB that the Lutsel K'e Wildlife and Environment Committee is interested in meeting with BHPB to acquire more information on land treatment as proposed for the Misery site.

Traffic monitoring:

- The acoustic counting system that was set up on the Misery haul road was too tall and had to be removed under order of Transport Canada.
- A counting system will be buried in both the Misery and Sable haul roads in the near future.
- Haul truck vehicle counts are being done on the Misery and Sable roads and a traffic report will be sent to the Agency by the end of April. Total vehicle counts will be addressed soon.

Agency Directors reiterated the importance of having total vehicle counts for the Sable haul road, especially during construction.

Action Item #4

Staff to follow-up with BHPB on its commitment to provide a traffic volume report by the end of April 2002.

Sable, Pigeon & Beartooth:

- The Pigeon stream crossing is under construction. An arched culvert design is being implemented to minimize disturbance to the aquatic environment. While construction on the stream crossing takes place, an ice pad will be constructed to allow construction of the road to continue.
- The 2001 aquatic baseline report will be available shortly. Aquatic baseline data collection will continue this summer.

Agency Directors and BHP personnel briefly discussed road construction. The Agency stressed the need to keep the road as low profile as possible to allow wildlife to cross. There is great expectation that the Sable road will be similar to Misery in profile and number of caribou crossings. The real or perceived risk of roads to wildlife, as expressed by communities, needs to be addressed and managed by BHPB. Changes can be made to existing 'offending roads' (e.g., those with unnecessary large berms).

Wildlife Effects Monitoring Program:

- BHPB and Diavik environmental staff recently met and decided to move towards more regional type surveys (i.e. jointly perform caribou surveys). The current BHPB wildlife survey area will be extended to encompass Diavik, and wildlife monitoring information will be presented in a combined report.
- Peregrine falcon studies are already done jointly with RWED.

- Due to the lack of snow this year at the mine site, the wolverine monitoring program (i.e. track surveys) has not yet been performed. It appears possible that there will be no data collected for wolverine this winter.
- Select community groups (i.e. Lutsel K'e and KIA) will be more actively involved in the evaluation of caribou observations during migration periods through the mine site.

Directors supported the joint wildlife survey initiative between BHPB and Diavik and noted that this was a sign of improved cooperation towards environmental monitoring.

Aquatic Effects Monitoring Program:

- Proposed changes for the 2002 program have been submitted to interested parties for feedback.
- A re-evaluation and review of the current monitoring program will begin on May 2nd with a meeting to discuss areas of concern and determine methods for modification and improvement.

Reclamation:

- BHPB submitted a reclamation liability estimate to the MVLWB and DIAND, using the Monte Carlo model, an alternative to the RECLAIM model. BHPB feels this model is more appropriate and is requesting that the MVLWB approve or disapprove the use of the model.
- Closure criteria are needed in order for BHPB, government and the MVLWB to determine when reclamation is complete and when security deposit credits can be awarded. BHPB is contracting out a consultant to aid in the formation of these criteria.
- The reclamation technique of 'power washing' as proposed for the Two Rock settling pond at the Sable pipe (i.e. washing deposited silt and solids from fine cobbles on the lake bottom with a pressured spray gun) should not result in natural substrates being affected.

Agency Directors and BHPB staff discussed the two different cost liability models presented and issues surrounding progressive reclamation and other assumptions of the models. Agency Directors noted that vegetation types (e.g., lichen veneer) that are affected by mining activities more than predicted during the environmental assessment process should be given reclamation priority and restored whenever possible.

Air Quality:

- A contract to produce a comprehensive report on the air quality-monitoring program, including all aspects of the program, has been tendered and should be completed by fall.
- The current air quality-monitoring program needs to be improved and brought up to speed. It will in time more closely resemble and be compatible with Diavik's air quality monitoring program.

Agency Directors noted that they are available to provide input into this program if BHPB is interested.

Action Item #5

Staff to follow-up on BHPB's commitment to provide a listing of the stations used in the air monitoring program and what type of air quality information is collected at each station.

Waste rock / seepage management:

- BHP B noted that the 2001 waste rock and seepage report has been distributed to interested parties and May 2nd will be the date of the meeting to discuss the results.
- An updated waste rock management plan for Fox pipe will be submitted to the MVLWB before pre-stripping takes place.

Agency Directors noted that information on how blasted rock is being segregated and moved to appropriate places in the waste rock piles is still outstanding. More details on this process are required.

Action Item #6

Staff to follow-up with John Witteman's (BHP B) commitment to provide a detailed description of the process in which blasted rock in the various pits is taken to the appropriate locations with the waste rock piles.

Miscellaneous:

- Environmental staff at BHPB will continue self-inspections of the mine site regularly (i.e. roughly every two weeks). They will concentrate on select areas of the project and any action items will be documented. The DIAND inspector can also follow-up on these action items if so desired.
- BHPB and Diavik environmental staff have met twice already to discuss a variety of environmental management issues.
- BHPB personnel have decided not to re-locate the main camp landfill. The design of the waste rock pile will be modified to surround the landfill in order to have it covered more frequently.

Business arising from last meeting

Directors briefly reviewed and discussed the action items arising out of the last board meeting. Specific action items that were discussed included Dr. Sprague's review of water quality limits (which was received favorably by the MVLWB), date of the Agency AGM, Director comments on the AEMP and WEMP reports and workshops.

Sable, Pigeon & Beartooth update:

Public hearing:

Directors discussed the public hearing process and reviewed the submissions from all the intervenors. The following points were noted:

- Most of the interventions submitted to the MVLWB contained similar concerns regarding technical deficiencies in the information provided (e.g., limited baseline data and geo-chemical test work).

- MVLWB staff are looking for direction in the drafting of the land use permits and water licence. Intervener presentations at the hearing should attempt to provide the MVLWB with appropriate conditions to be attached to these permits and licences.
- Agency Directors noted their support for the issuance of a two (2) year water licence as proposed by DIAND. In two year's time, both water licences held by BHPB can then be amalgamated into one.
- The Agency presentation will be a brief summary of the written submission.

Action Item #7

Tony and Staff to prepare presentation for the MVLWB public hearing on Sable, Pigeon & Beartooth licencing.

Draft work plan for fisheries act authorizations:

- In response to an Agency request to DFO there may be a timeline proposed for review and an opportunity for community consultation.
- Fish and aquatic habitat compensation concepts are still in draft form and not yet approved by DFO.
- Demonstration of means to compensate (i.e. concepts) can be agreed on by DFO and interested parties before details are approved.

Seepage review and meeting update:

Zabey briefed the Directors on the fall seepage survey report that was submitted to the MVLWB and noted that Dr. Kevin Morin has been contacted to perform a review of 2001 waste rock and seepage report. Directors discussed the review options as presented by Dr. Morin and noted that a somewhat thorough technical review is still necessary at this time.

Action Item #8

Zabey to contact Kevin Morin and discuss the Agency's requirements for a review of the 2001 seepage and waste rock report submitted by BHP B.

Five-year review of Environmental Agreement

Zabey gave an update to the Directors on the five-year review of BHPB's Environmental Agreement and noted the following:

- BHPB's January 25th letter officially triggered the review process.
- BHPB, NSMA and the Lutsel K'e First Nation have all submitted letters proposing a number of changes to the agreement.
- DIAND is proposing to have an open review process and consult properly with affected groups (i.e. aboriginal communities).
- The review process, as proposed, would have the Agency board of Directors vote on proposed changes to the agreement. In the event that the Directors do not unanimously agree to a change then the aboriginal communities would be consulted.

- The proposed changes generally appear to be non- problematic, but will still require proper ratification before becoming formal. The additional seat for Akaitcho Treaty 8 and a transitional clause for a regional framework appear to be the only substantial issues.
- Directors noted that appropriate funding will be required if an additional seat is added to the Agency board.

Spring and Summer Schedule Planning

Zabey briefed Directors on the Agency's spring and summer schedule and noted that the Sable, Pigeon & Beartooth public hearing is set for April 4th & 5th, May 2nd is scheduled for the annual seepage meeting, the re-evaluation meeting for the AEMP and Panda Diversion Channel monitoring program is on May 3rd, and Agency mine site visit is June 7th – 8th. Directors discussed who would be attending each event.

March 25th, 2002

Treasurer's Report

François, the secretary treasurer, reported that for the financial period of April 1st, 2001 to March 1st, 2002 approximately 72% of the budget has been spent. This expenditure pattern is consistent with what was predicted. The budget forecast to the end of the fiscal year (i.e. March 31st, 2002) shows that approximately 97% of the budget will be spent. This forecasted figure includes the 2001 – 2002 Agency annual report, the current board of Directors meeting and outside contracts (e.g. Kevin Morin's review of the 2001 seepage report). François also indicated that the 2002 - 2003 budget has already been previously approved and BHPB will be dealing with the over contribution in this year's budget.

Meeting with DFO (Marc Lange, Stephanie Astephen)

Marc and Stephanie provided an update on various DFO activities associated with the BHPB project. The following points were noted:

Fish Habitat Compensation Fund update:

- Phase one funding has been given to the NSMA and Lutsel K'e First Nation research projects (i.e. Prelude and Stark Lake projects respectively). Funding for phase two of the studies will be reviewed following the completion of phase one.
- The Dillon consulting proposal to restore fish habitat in Mathews Lake has been approved by DFO for funding under the compensation fund. All phases of the study, including follow-up monitoring, have been approved by DFO for funding (~ \$700,000). A net gain of fish productivity is the goal of the compensation program. The decision to award Dillon the funds now lies with the federal Department of Public Works, which now administers all funding for such contracts.
- Approximately \$650,000 is remaining in the fund if the Dillon project is awarded the funding by Public Works.

- A third round of requests for proposals will be going out shortly. Before the third round of proposals are considered for funding, the ongoing phase one studies being performed by the NSMA and Lutsel K'e First Nation will be reviewed for additional funding (i.e. phase two of the studies).

Agency Directors and DFO personnel further discussed the Dillon proposal and issues relating to community support, deliverables and the size (financial) of the proposed project. An Agency Director expressed concern that the Dillon proposal requires a large portion of the fund, and was chosen ahead of some of the other proposals put forward by impacted aboriginal groups.

Fish out studies update:

- DFO contracted out a multi-phase review of the data from fish-outs performed at both BHPB and Diavik. The original review by the DFO science and research department was basic.
- The first phase of the review focused on “cleaning up” the original data that had been inconsistently collected for the various lakes, and a preliminary feasibility study on the usefulness of the data to meet research needs.
- Initial results from phase one of the review indicate that a significant amount of data is missing or not reliable.
- DFO is currently discussing a funding arrangement with BHPB and Diavik for the QA / QC work required of the database created in phase one of the study.
- Phase two of the study will involve a more detailed analysis of the data and a variety of biological research questions being addressed (e.g., estimates of fish populations based on catch per unit effort, habitat assessments).
- Lessons have been learned from past fish-out studies. Communication and implementation between DFO and the proponent needs to be improved during fish-outs (e.g., development of a protocol for methodology, and more frequent discussions while in the field).

Action Item #9

Staff to follow up with DFO personnel on acquiring a copy of the first phase of the review on Ekati and Diavik fish out data.

No Net Loss policy and habitat compensation:

- DFO is of the position that the Panda Diversion Channel (PDC) is permanent fish habitat and therefore destroying it in the future will have implications. The design of the channel however does not allow for a permanent walk-away solution, as it requires annual care and maintenance to keep it operational (e.g., snow clearing). BHPB, DFO and other stakeholders will have to address the future of the channel in great detail very soon. In the future, DFO will aim to be more involved during the construction phase on diversion channels such as the PDC.
- Compensation credits are currently not given for pit lake habitat compensation, as it has not yet been proven that pit lakes can be reclaimed back to productive and healthy systems. DFO has, however, re-evaluated refilled pit lakes as potential compensation at the back end of a project provided the proponent can prove that the lake has been

adequately restored. Ecosystem health indicators such as lake and stream water levels and contaminant loadings must be carefully monitored.

DFO personnel and Agency Directors discussed the current compensation concepts as proposed by BHPB for the project and the following was noted:

- Compensation of fish habitat should occur close to the mine footprint.
- Some compensation concepts may have more merit (e.g., improving connections) as compared to others.
- Higher compensation ratios are applied in cases where there is higher uncertainty.
- Measurements of successful habitat compensation is the missing link in a lot of cases. The success of compensation has varied widely throughout Canada. Success indices and stringent monitoring requirements should perhaps be attached to fisheries authorizations in the future to address this uncertainty.

Action Item #10

Pete and Robin to review proposed fish habitat compensation concepts submitted by BHP B.

BHP B comments on Agency 2000-2001 annual report & recommendations

Zabey briefed the Directors on BHPB's response the Agency's 2000-2001 annual report. Directors further discussed the difference of opinion between BHPB and the Agency in regards to the impact to the local wolverine population from the loss of 15 animals from 1998 – 2001. The following points were noted:

- Agency comments in annual report were justified. This was an ecologically significant cumulative effect (Misery, Diavik & winter road camp).
- The loss of 15 animals is considered "significant" in terms of removals from the local population, especially since wolverine have slow recovery rates (i.e. takes a long time to replace lost individuals).
- Appropriate mitigation measures have been taken since the impacts occurred, to address the food management problems at Misery and Ekati main camp.
- The Agency will follow-up on BHPB's comments on this issue and additional literature on wolverine will be used to explain the Agency position.

Action Item #11

Zabey and Francois draft a letter to BHP B providing the rationale for the Agency's conclusion that a significant adverse cumulative effect on wolverine took place at the local population level at Lac de Gras (1999-2001).

2001-2002 Annual Report Planning:

Zabey briefed the Directors on annual report planning for the 2001 – 2002 report. Directors and staff discussed the main points to be addressed in a number of chapters including wildlife effects, aquatic effects, air quality monitoring, special effects monitoring, traditional knowledge, regional monitoring, waste rock and seepage, and assessment of regulators. The following action items,

some of which are directly related to annual report production and some of which are not, resulted from the discussion:

Action Item #12

Zabey to draft a letter to EMAB regarding the potential of jointly hosting a workshop on how industry can better implement TK (e.g. development of a protocol).

Action Item #13

Directors and staff to review air quality and re-vegetation reports with a focus on the potential impact to wildlife habitat (e.g. dust deposition on vegetation).

Action Item #14

Zabey to meet with the TK project leads from each aboriginal society member of the Agency and acquire an update on the progress of TK studies related to BHP B.

Action Item #15

Staff to invite Bob Wooly, executive director of the MVLWB, to an upcoming Agency board meeting.

March 26th, 2002

Community visits and joint initiatives with EMAB

Directors and staff discussed the continued recent community site visits and the continued cooperation with EMAB. The following points were noted:

- Cooperative relationship between the boards has been very constructive and useful.
- An increase in community consultation has resulted (e.g., numerous meetings with Lutsel K'e environment committee and Dogrib Treaty 11, a potential trip to Kugluktuk).
- Communities appear to find joint visits with Agency and EMAB members to be more useful as conversation is less restrictive (i.e. conversation not limited to BHPB or Diavik). During meetings with communities it was noted a number of times the importance of considering exploration camps and other nearby projects for effective cumulative effects monitoring. The combined effect from many small, but un-monitored operations has the potential, in combination with the two mines, to pose a significant environmental risk.
- Opportunity to host workshops together (e.g., TK, cumulative effects).
- Collaboration has been cost effective (e.g., sharing of office and equipment expenses).

Action Item #16

Staff to coordinate joint trip to Kugluktuk for EMAB and Agency staff.

Fox pipe update:

Zabey briefed the Directors on recent regulatory and mining activities for the Fox development. The following points were noted:

- At the public hearing in May 2001, the Agency recommended to the MVLWB that mining should not be authorized until more information, specifically on waste rock management and water quality was provided. As there were only limited concerns regarding the dewatering phase of Fox pipe, The MVLWB approved dewatering activities shortly after the hearing.
- Mining aspect of the amendment was approved by MVLWB in February 2002, following a review of the additional information provided by BHPB on predicted water quality changes. No new information was provided on waste rock management before this decision was made.
- A draft licence was not distributed before the final decision by the MVLWB and only minor edits were made to the existing licences and SNP program.
- As noted earlier, dewatering activities at Fox have resulted in an ice dam forming between Fox 2 and Fox 3 Lakes thus causing overland discharge of water into Maritime Lake and one-two extra metres of ice buildup in this area.

Directors briefly discussed the lack of a waste rock management plan for Fox and the minor changes made to BHPB's waster licence.

Cost-Variance update:

Zabey gave a brief update to the Directors on the status of the cost variance report and meetings and noted the following:

- Meetings between BHPB, DIAND, GNWT and the Agency are continuing.
- BHPB and DIAND appear to be in disagreement over the major principles of the security and cost liability estimate.
- Under the Environmental Agreement, a review of BHPB's proposed changes to the cost liability estimate is required. At this time, BHPB has proposed no changes to the existing liability estimate.
- DIAND has indicated that it may be proposing a change to the liability estimate and requiring more security be placed.
- Reviews by DIAND and GNWT on the proposed changes to the liability and the new model (Monte Carlo) presented by BHPB are still outstanding. DIAND reclamation expert, John Brodie, has arrived at a different liability estimate using the RECLAIM model, but this is not considered a review by DIAND.
- Under a separate review process, the MVLWB is also having an independent consultant review the Monte Carlo model to determine if it is an acceptable replacement for RECLAIM for licencing purposes.
- BHPB has requested that the Monte Carlo be either approved or rejected in the near future so that future liability estimates will not have to be run on both models.

Directors discussed the Agency role in the review process (i.e. watchdog of the review process). Directors also proposed that the Agency should assist the process in any means to ensure the respective parties move towards conclusion of their review process. It was also noted that the

cost variance process should ultimately include all of the mine components including Sable, Pigeon & Beartooth.

Action Item #17

Staff to invite DIAND representatives to the next Agency board of Directors meeting to discuss the cost variance process and get clarification on DIAND's position.

Action Item #18

Robin to review the reclamation annual reports that have been submitted to MVLWB.

Carrie and Desperation update:

Zabey briefed the Directors on the ongoing development at Carrie and Desperation ponds at the Misery operation. The following points were noted:

- The current Misery mine plan would see Desperation pond surrounded in waste rock, effectively making it a sedimentation pond. Carrie pond would be left physically unaffected by waste rock placement.
- DFO in their March 7th, 2002 letter to BHPB indicated that this change in the mine plan might require an additional environmental screening to evaluate the need for further mitigation.
- BHPB will need to construct two cofferdams in order to prevent water from moving from the Desperation sedimentation pond into Carrie Pond (receiving environment). BHPB has submitted an application to the MVLWB to construct these dams.

Action Item #19

Staff to acquire details on cofferdams and what potential issues that may result from using this particular dam.

Action Item #20

Staff to discuss with DFO its position on the proposed change to waste rock management at Misery and acquire further clarification on the issues raised in the March 7th, 2002 letter to BHPB from DFO.

Inspections update:

Zabey updated the Directors on the hiring process for the vacant DIAND inspectors for both the BHPB and Diavik projects. The following points were noted:

- The Agency and EMAB both wrote letters to DIAND expressing major concern that full time inspectors have not yet been hired and that inspections for both BHPB and Diavik are being carried out on an irregular basis during a time when intense construction is taking place at both mining operations.
- Bob Overvold, Regional Director for DIAND, responded to the Agency's February 8th, 2002 letter noting that staffing efforts are being made and inspections of BHPB and Diavik will continue.

- BHPB environmental staff have begun self inspections of the mine site to supplement DIAND inspections. BHPB has also requested that the other regulatory bodies (i.e. MVLWB, DFO, Environment Canada) visit / inspect the project on a more frequent basis.

Directors briefly discussed the hiring process for the inspector position and noted the following:

- A highly qualified inspector is critical to the continued effective monitoring of such a large mining project. A higher salary is also required to attract and retain such a qualified person. The advertised inspector position should be re-classified to reflect the importance of the position.
- DIAND inspectors in the past have been excellent sources of information and regular inspections only helped to improve the environmental management of the Ekati Mine.

Any Other Business:

Tibbet to Contwoyto winter road:

Zabey briefed the Directors on the regulatory review of the winter road application and the following was noted:

- A licence of occupation application has been submitted to DIAND.
- An application for the appropriate land use permits has not yet been submitted to the MVLWB. There is potential that the application may be sent for an environmental assessment.
- The MVLWB will solicit the Agency for comments on this application, as it directly applies to the BHPB project.

De Beers Snap Lake project:

Directors briefly discussed the environmental assessment of the De Beers Snap Lake project, specifically Agency involvement with regards to the review of the cumulative effects section of the De Beers environmental assessment report. It was noted that the Agency should offer advice for effectively managing cumulative impacts (e.g., cumulative effects of BHPB and Snap Lake projects). Caribou migration appears to be the major link in respect to cumulative effects for these two projects.

Action Item #21

Directors and staff to perform a brief review of the cumulative effects section in the De Beers Snap Lake environmental assessment report with a focus.

Miscellaneous:

- The seventh edition of Agency newsletter will be released and distributed after the MVLWB public hearing for the Sable, Pigeon and Beartooth applications has been completed.

- The air quality vegetation-monitoring program at BHPB needs to be reviewed by Directors and staff and discussed in more detail at a future board meeting.
- The logistics and timing of a Kugluktuk visit for Agency staff needs to be further evaluated and discussed.

Date of next board of directors meeting June 6 –9, 2002.

Meeting adjourned at 12:00pm.

Minutes Approved by

-Original Signed By-

Red Pedersen, Chair