Notes from the Inter-Agency Coordinating Team April 18th, 2002 Meeting

Participants:

John WittemanBHP Billiton (BHPB)Jim MillardBHP Billiton (BHPB)Helen ButlerBHP Billiton (BHPB)Derek ChubbBHP Billiton (BHPB)

Laurie CordellMVLWBLatisha HeilmanMVLWBClint AmbroseDIAND

Marc Lange Department of Fisheries and Oceans (DFO)

Anne Wilson Environment Canada

Raymond Bourget RWED – North Slave Office Patrica Hanley RWED – North Slave Office

Lionel Marcinkoski RWED

Zabey Nevitt Independent Environmental Monitoring Agency (Agency)
Robin Staples Independent Environmental Monitoring Agency (Agency)

Meeting began at 9:30

Round Table Updates:

John, Jim & Helen gave an update on recent activities at the mine site and noted the following:

- The first wildlife survey of the season was recently performed for the Ekati study area. The wildlife survey of the Diavik study area is being conducted today. Only a few caribou were observed during the survey. John noted that copies of the survey areas would be sent to the Agency and RWED as requested. The Agency will also be copied on all wildlife incident reports as requested by Zabey.
- The appropriate wildlife permits for the 2002 WEMP have not yet been approved by RWED and John requested that Lionel pass on BHPB's concerns to those directly involved in the permitting process.
- AEMP winter water quality sampling is ongoing. A helicopter has been required for sampling.
- Dewatering of Fox Lake is continuing and all discharge limits are being met.
- Construction of bridge at the Nero-Nema stream crossing is continuing. The west abutment has been finished and work continues on the east abutment. The I-beams will follow and the ice pad cleared of any debris and contaminated snow.
- The Sable haul road has reached the Pigeon stream and a nine metre high culvert is being installed as part of the stream crossing.
- Snow clearing has begun in the Panda Diversion Channel. The culverts have been dug out and the covers will be removed prior to freshet. The amount of snow in the channel and at site has been much less this year than that observed in previous years.
- Large diameter drilling has recently been completed on the future Beartooth pipe.

- BHPB performed a self-inspection on March 19th and the inspection report will be submitted to IACT members shortly. The DIAND inspector can address the specific action items arising out of this inspection during his next site visit.
- Minutes from the February 15th liability and cost variance meeting will be sent out to participants in the near future.
- The 2001 seepage and waste rock survey report will be distributed shortly and the date for the technical meeting to discuss the report is May 2nd.
- A summary of discussion from the AEMP workshops (i.e. discussion on proposed changes) was recently sent out to participants. The re-evaluation of the AEMP and Panda Diversion Channel (PDC) monitoring program will be discussed at a meeting on May 3rd.
- The sediment-like clay found in the Koala pit is being stockpiled in the Long Lake drainage and will be tested to determine its value for restoration activities.
- BHPB, in cooperation with Diavik, is performing a preliminary study to determine the feasibility of wind power at the mine site. This one-year study will involve constructing a 30 m tower by cell B to monitor various wind parameters. BHPB will be looking for funding from federal government at some point in the future with respect to this study.
- The comprehensive air quality monitoring program report is expected to be completed later this fall. Zabey mentioned that a consultant working for Environment Canada had been in touch with the Agency, and was requesting information on BHPB's reporting procedures for greenhouse gases. John Witteman agreed to respond to the enquiry and indicated that Ekati's emission data is available on a voluntary website for greenhouse gas emissions.
- Environmental awards were recently given out to a number of environmentally conscientious staff.

In response to a question regarding the aquatic monitoring for the large diameter drilling at the Beartooth proposed pit, Jim noted that aquatic monitoring was performed before and during drilling. Samples for total suspended solids are taken weekly during drilling and a full suite of aquatic parameters (including metals) are collected once after drilling has been completed. Samples are typically taken about 10 - 20 metres away from the drill (at a safe distance) and historically only minor disturbances to sediments have been observed. The aquatic monitoring data will be sent out when it becomes available.

Following John's update a discussion took place on the ongoing review of BHPB's liability estimate, and the protocol for review of seepage reports and data.

Raymond & Patricia began their update by discussing the wildlife issues and incidents that arose at the mine site in 2001 and noted some of the recommendations that were forwarded to BHPB to address these problems (e.g. camp layout, waste handling). Raymond noted that most of the concerns that were raised and recommendations that were offered have been addressed by BHPB. RWED staff last inspected the BHPB site on February 12th, 2002 and no wildlife issues were noted at either main or Misery camps. RWED noted that they are pleased with the steps taken by BHPB to address wildlife issues and concerns. Raymond mentioned that the focus of RWED inspections is on food attractants, but in response to a question from Helen, noted that other potential natural factors such as temperature, snow depth, and available food sources can also influence wildlife distributions. Raymond also requested that BHPB monitor flex joints in the tank farm closely as the temperature begins to increase, as to avoid the minor spills that have

been observed in the past. He was also interested in knowing the potential impact to wildlife from the wind turbines that BHPB may use in the future.

John responded to Raymond's concerns noting that no impacts to wildlife are predicted from the proposed wind turbines, as they would be constructed near cell B of the Long Lake containment facility well within the main mine footprint. As for monitoring of the tank farms, John noted that they continue to be diligently monitored and that this area of inspection is really a DIAND responsibility.

Clint noted that he is still getting caught up to speed on the BHPB file and his most recent inspection of the mine site was on March $27^{th} - 29^{th}$, 2002. During this visit, he inspected the following:

- Misery waste rock dams.
- Waste handling facilities at Misery (i.e. landfill and incinerator).
- Placement of sediment curtains and construction of a trench in the King Pond facility to help reduce total suspended solids when mine water once again gets discharged.
- Nero-Nema bridge construction.
- Fox dewatering. Clint has recommended that BHPB carefully monitor Martime and Fox Lakes closely as freshet approaches to observe any impacts that may have occurred as a result of dewatering activities.
- Large diameter drilling at Beartooth Lake. BHPB is instructed to send pictures of the drill sites once clean up has been completed.
- Stockpiled contaminated wasterock (e.g. truck spills). This waste is to be placed in a specified area and GPS located. It should be capped in the near future.

Following Clint's update, a discussion on the desperation cofferdams took place and the following was noted:

- The dams need to be constructed in the winter, but are not designed to be a permanently frozen core structure.
- Two dams need to be constructed upstream of Carrie pond to control waster discharge from the waste rock piles. It appears that only one dam will be constructed in time (i.e. at the deeper east draw) and BHPB may not have enough pumping capacity to keep water from moving downstream into Carrie Pond. There is a significant chance therefore that water that does not meet water licence requirements may enter Carrie Pond.
- The waste rock piles are located approximately 250 metres upstream of Desperation Pond and it is expected that exposed snow on the tundra between these two locations will make up a majority of the seepage / discharge.
- BHPB is sending a letter in the very near future to the MVLWB and others to discuss this issue and potential contingency plans (e.g. silt fence across west draw, additional water quality sampling in Carrie Pond, sand bags after freshet).

Following-up on the discussion on cofferdams, Zabey inquired of BHPB if this situation (i.e. majority of seepage expected from snow on the tundra) would be a good opportunity to carry out the tundra soil study that is still outstanding. Derek replied by noting that a more controlled environment is required to carry out the study. The pilot land treatment study would have been an appropriate opportunity.

Derek began his update by noting that a land treatment application has still not been submitted and BHPB is still reviewing their options. A fisheries authorization and approval by the MVLWB has also been recently given to BHPB to construct the Desperation cofferdams. Fisheries authorization negotiations with DFO are still ongoing for the Sable, Pigeon & Beartooth development. He also mentioned that BHPB has submitted a letter to the MVLWB subsequent to the April 4th & 5th public hearing noting that BHPB remains available to respond to any requests for clarification of the information on the public record. BHPB will be responding shortly to the Agency clarification request.

Laurie noted that public hearing for the Sable, Pigeon & Beartooth applications will resume May 9th -10th and the amended interventions, commenting on the additional information presented at the hearing, must be received by April 29th. She mentioned that she has also been involved in the review of the application to construct cofferdams at Desperation and as noted earlier, the MVLWB has approved this application recently. Laurie also reminded John of the maps that the MVLWB has previously requested. John committed to providing these in the near future.

Zabey began by noting that the Agency is currently drafting the 2001-2002 annual report and the annual audit has recently been completed. The Agency is also carrying out a review of the 2001 seepage survey and waste rock report with the assistance of Dr. Kevin Morin. His report is expected shortly. Agency directors and staff are also currently reviewing the report on fish habitat compensation concepts, the Air quality report performed by Janet Kidd, and the cumulative effects section of DeBeers Snap Lake environmental assessment report. Comments will be submitted once the reviews are complete. A letter regarding the Agency's comments on the AEMP and WEMP workshops and programs will be submitted to BHPB and copied to others very shortly. In response to BHPB's comments on the Agency's position on impacts to local wolverine populations, the Agency will be sending a letter outlining how the Agency reached their conclusion in respect to this issue (available literature on wolverine populations will be referenced). As well, Zabey reminded John that a detailed description of the methods used by BHPB to direct waste rock to its appropriate locations in the waste piles is still required (i.e. management system). A breakdown of haul truck and light truck counts on Misery and Sable haul roads are also still required. John agreed to address these issues.

Anne noted that she has been away for last few weeks and is getting caught up with the file once again. She mentioned that the first phase of the flocculent and coagulant study (i.e. literature survey) has been completed. A determination of analytical methods for field samples and the persistence of these polymers in aquatic ecosystems respectively are the next phases of the study. Anne noted that Environment Canada has no formal inspection planned for BHPB in the near future. She also expressed her thanks to John for all the CD copies of past reports.

Marc also thanked John for the CD copies of past reports and mentioned that he uses them quite often. Marc continued his update by noting that DFO is still working on its analysis of fish out data. He was interested in fish outs that were performed in 2000-2001, but would discuss this further with BHPB at another time. Marc concluded by mentioning that DFO will be bringing a fisheries consultant to the AEMP and PDC monitoring program re-evaluation meeting scheduled for May 3rd to hopefully provide BHPB with more helpful feedback on these programs.

Next meeting will be held on May 17th at 1:15pm in the Agency Boardroom.

Meeting finished at 3:30pm