



Independent Environmental Monitoring Agency

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Summary of Discussion from the Inter-Agency Coordinating Team (IACT) Meeting of March 21, 2003

Participants:

| | |
|-----------------|-----------------------------------------------|
| John Witteman | BHP Billiton (BHPB) |
| Jane Howe | BHP Billiton (BHPB) |
| Latisha Heilman | MVLWB |
| Jason McNeil | RWED |
| Elaine Blais | DFO |
| Anne Wilson | Environment Canada |
| Tim Byers | Independent Environmental Monitoring (Agency) |
| Carole Mills | Agency |
| Sean Kollee | Agency |

Meeting began at 1:15pm

Chair: Carole

Next Meeting: May 9th, 2003 at the Agency boardroom (1:15pm).

The IACT Terms of Reference and Mandate:

The March 21st IACT meeting was the first attended by the new Agency manager, Carole Mills, Elaine Blais from DFO and Jason McNeil from RWED.

To enlighten the new participants and refresh the memories of others, a discussion was held on the IACT mandate, the history of why it was formed and how it has evolved:

IACT was formed to address communication difficulties on trans-agency issues. The forum was arranged to exchange information not to make decisions and does not have regulatory authority. The structure was intentionally kept informal (notes are taken rather than minutes, and the group is called a team to reflect its role in building relationships). BHPB has introduced forward-looking ideas at the IACT forum to those in attendance. IACT does touch on regulatory issues when appropriate, especially to update the status of licences. A regulator (for example the MVLWB) will not make decisions at an IACT meeting. A good example of IACT assisting in licencing is the Misery Atomization project where IACT addressed the status of the application and technical issues contained

in it. Discussions of the licence itself occurred through other meetings arranged by BHPB and the MVLWB. If more time was available, the IACT forum could have been used to discuss the BHPB Impact 2003 report, unfortunately scheduling did not allow this and a separate meeting was arranged. The winter road has been discussed but is not part of the IACT TOR. Generally the winter road should not be discussed unless the other joint venture partners (Diavik and Echo Bay) are invited to attend the IACT meeting. BHPB also expressed that it may not be able to answer on behalf of the joint venture. The role of the DIAND Inspector at IACT is often to provide an update of areas of concern and positive events at the mine when possible.

Round Table Updates:

John:

John was asked to provide a summary of the complete mine operation:

Fox Pit

- Fox Lake dewatering commenced in 2002 and was discharged to receiving environment. BHPB planned to remove 60% of water prior to reaching discharge limits. However, only about 30% was dewatered before the water became silty. Dewatering and discharge to the environment ceased at this point because water quality criteria for TSS were exceeded.
- Now, Fox Lake is being dewatered into Cell D of LLCF. Last month, a large glacier formed at the original discharge point, and additional piping was added to move the discharge – but still within Cell D. Flocculant is added to the water before it is discharged to reduce TSS.
- The rate of dewatering is about 8 cubic meters per minute. 250,000 cubic metres have been dewatered so far into Cell D.
- Overburden and waste rock removal will require 2 years of excavation. D-mag's (BHPB's largest shovel truck with eight tonne load capacity) machines are now in Koala pit and will be moved to Fox Pit to carry out the excavation
- In three years the throughput of the plant may be increased to process ore from the Sable, Pigeon and Beartooth expansion. The process plant capacity is under examination by BHPB

Panda Pit

- Open pit mining will be finished in March or April of 2003. The pit is about 300 metres deep.
- The pit is very narrow at the bottom and the last bench of kimberlite is currently being removed.
- Underground mining will occur beneath the open pit. The open pit acts as a funnel for rain, snow and groundwater, and drainage control is necessary to prevent water flowing into the underground. As a result the pit sump must be continue to be pumped regardless of the difficulty of pumping water from that depth. BHPB has a good record of the sump water quality and also ground water quality (saline).

- Methogenic bacteria are present in the groundwater flowing into the pit.
- Panda Sump water may be pumped to Pelzer Pond which is being examined for fish, BHPB believes it does not contain fish

Koala North Underground Mine

- A small open pit was completed in 2000, followed by development and commissioning of the underground mine.
- At full production 10,000 tonnes of ore per week will be removed from the Koala North underground mine.
- The Koala North mine is situated between the future Koala and Panda underground mines. Access to the Koala and Panda underground will be possible from the Koala North underground mine for final ore recovery.
- An ore pass will be dug to an area closer to the process plant, the ore will be moved via underground conveyers versus trucks. In determining the method of ore transport from underground, BHPB considered greenhouse gas emissions among other things such as safety, maintenance, and capital costs.

Beartooth Pit

- Beartooth overburden and waste rock removal will commence in July 2003 after the lake has been dewatered.
- The Bearclaw frozen core dam is currently under construction.
- Pumping water from Bearclaw Lake will commence at freshet and continue during open water, as needed to avoid raising or lowering the natural hydrograph (BHPB must submit a plan to DFO 60 days prior to pumping from Bearclaw Lake).
- The Bearclaw dam prevents uncontrolled release of water into the receiving environment or Beartooth Pit. On an average basis the PDC flow will be lowered by the loss of the Beartooth drainage basin (60,000 cubic metres). All other drainage will continue down the PDC as before. If water in Bearclaw Lake doesn't meet discharge limits (an unlikely event) the effect on the PDC of reduced flow is not expected to be significant (only 10% of the area of the drainage basin would be dammed). Water can be retained behind the dam in the unlikely event it does not meet discharge limits.
- Some inflow from freshet, groundwater and precipitation will occur into Beartooth; otherwise no water will enter the pit.

BHPB's Annual Water License and Environmental Agreement report will be delivered to MVLWB next week (plain English to be delivered later) followed by the Impact 2003 report that is due by the end of April 2003.

Online reports such as OEMP are due to be posted soon. 80 reports are expected to be posted eventually. The reports will be part of the corporate website hosted out of Melbourne.

A revised PDC program still requires negotiations with DFO and other stakeholders such as the Agency. The new draft is underway but the delivery date was not announced.

The Sable road will be built as far as the first stream this summer (the first stream past the Pigeon culvert). The DFO fisheries authorization requires culvert installation in winter. The first stream was estimated to be a few kilometers past the Pigeon culvert. Rock from the Beartooth pit excavation will be used to build the road.

Results of hydrocarbon volatilization from asphalt plant are coming soon and will be distributed. When asked how levels will be monitored, John indicated he did not know yet.

The Landfarm is currently full but contaminated material is still to be brought there. It will then be moved on to the asphalt plant.

Jane

The Misery Atomization Land treatment licence has been delivered. Equipment for the project should be on the winter road at this time and construction is due to start this spring. An IACT site visit may be coordinated for the initial operation of the atomization towers. A maximum of 100,000 cubic meters of water will be discharged annually, as per the license. The water will be atomized over a period of 71 days, in both summer and winter. The original project was designed to treat 800,000 cubic metres through 16 towers. The initial application was for a ½ scale project to discharge up to 400,000 cubic meters of water for treatment using 8 towers. In response to concerns raised regarding the volume of water, BHPB submitted a proposal to reduce the scale of the project to two towers and 100,000 cubic meters. Latisha indicated that 100,000 cubic meters is the threshold between a type 'A' and type 'B' water licence.

Jane noted that discharge criteria for water entering Cujo Lake from the land treatment area are more stringent under the new Misery Atomization license than the discharge limits for water that is discharged from King Pond directly to Cujo Lake under the N7L2-1616 water license. This could potentially cause confusion in future DIAND compliance reports. Latisha commented that when the original type 'A' water licence N7L2-1616 expires at the end of 2004 the more stringent criteria would likely be adopted.

Only nine days remain until implementation of the ISO 14001 environmental management system for the Ekati mine. The audit is scheduled for the middle of June (the ISO system requires three months of operations prior to certification). Elements of the ISO system must be made public. BHPB is not required to use ISO accredited suppliers, however a corporate policy of BHPB does exist to cascade ISO requirements to employees, contractors and partners for Environmental Management Practices. The ISO audit will look at document control, policy, action on objectives, job descriptions and many others. The compliance audit will be carried out from the 5th to the 6th of April.

Agency Director Bill Ross has agreed to be Jane's thesis advisor for her Masters degree project on evaluating the efficacy of the SPB EA and regulatory processes. She will be

investigating what has been successful in the SPB process and what lessons BHPB can use to improve its next licence application.

The original Ekati water licence (N7L2-1616) expires at the end of 2004. The IACT group may be able to be used to improve communication among the stakeholders and the BHPB submission. The production and delivery of the Sable, Pigeon and Beartooth licence was a lengthy process because many technical questions were not answered to the satisfaction of the reviewers. Information request meetings were necessary to establish the specific questions for BHPB to answer. It was also noted that no technical committee currently exists for BHPB.

Carole mentioned the requirement to ensure the aboriginal peoples are properly consulted. This may prevent the IACT meeting from being the forum for the licence discussions. Jane agreed with the consultation requirement but noted that the application is for a renewal not a new one and that community consultation related to a single licence is difficult. The usual BHPB process is to consult with communities on the entire project not aspects of it.

A Sustainable development in the diamond mines workshop in Ottawa is now scheduled for June 5th-6th rather than June 7-8th as was originally proposed.

Latisha

The Misery Atomization project has been approved. Latisha is waiting for development of the monitoring program for the project. Risks of erosion or permafrost thaw from water deposition on the tundra are to be mitigated through the licence. She is expecting the Annual Environmental Agreement and Water Licence annual report next week from BHPB.

The ARD and spill contingency plan were sent back to BHPB with requests for further information.

Comments on the AEMP Refinement report are due 24th of March. BHPB sent a letter that identified one additional refinement that was made subsequent to the printing the report. The refinement was recommended at the BHPB workshops in February

Elaine, Jason, Tim

Issues they had intended to bring to the IACT meeting had already been discussed.

Sean

Sean noted he had delivered Agency comments on the Traditional Knowledge workshop recently hosted by IEMA and EMAB to Agency Society Members and Signatories.

The Agency is planning a Board Meeting for a date sometime in June and hopes to coordinate the annual site visit along with the freshet at Ekati.

The 32nd Board Meeting summary of discussion is posted on the web.

On the subject of the tracking program, the Agency is unable to identify and track the internal deadlines of the regulators such as when the MVLWB meets or when DFO or MVLWB has to issue approval for dewatering or culvert engineering designs. The Agency, determined by its mandate created in the Environmental Agreement does not intend to take on a regulatory role in the tracking system. It intends to participate where possible and monitor the success of the tracking system in improving environmental management of the mine.

John indicated that BHPB has to implement a similar tracking system as part of its ISO accreditation. When asked if IACT could have access to it, he indicated he'd consider it.

Carole

She discussed regional TK panel and outcomes of the TK workshop.

The Agency will be responding to the deadline comments on the AQMP of April 30th.

Meeting Adjourned at 2:45 pm.