



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

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David Livingstone
Director, Renewable Resources and Environment
Department of Indian Affairs and Northern Development
Box 1500
Yellowknife NT X1A 2R3

Dear Mr. Livingstone

Re: BHP Billiton Environmental Impact Report (EIR) 2006

Please accept this letter as the Agency's comments on BHP Billiton's EIR 2006 as requested in your letter dated May 31, 2006. Despite some deficiencies as identified below, the Agency finds the overall report satisfactory and recognizes the effort that BHPB and its consultants expended in preparing this important document. We note that the plain language summary of the EIR 2006 was not delivered at the same time as the full technical version and we encourage the company to do so in the future.

The Agency has three major points we would like to raise and then a number of other comments and suggestions.

Major Points

1. Usage of Adaptive Management

In reviewing the EIR, we noted several good examples of adaptive management were presented in the text, and summarized in Tables 3.2-1 and 6.2-1. These are a considerable strength of environmental management at Ekati. There were also many examples of mitigative measures and environmental policies that are clearly not adaptive management as defined by BHPB. For example, Table 3.2-1 lists many actions, such as use of low sulphur fuel and silt curtains, that are simply best practices or in some cases, regulatory requirements (e.g. revegetation research).

Responsible management of project effects are not necessarily adaptive management if the mitigative measures simply reflect best practices. We encourage BHPB to make a clear distinction between adaptive management and implementation of best practices.



2. Use of Traditional Knowledge (TK) in Mine Management

The Agency is pleased to see that BHPB has made a more serious effort in documenting the use of TK in managing the environmental effects of the Ekati mine. The Agency has already gone on record complimenting BHPB on the recent report related to the Caribou and Roads project. However, the other initiatives cited require better documentation to explain how the TK of Aboriginal employees, the Naonaiyaotit Traditional Knowledge Project, and the Aboriginal elder visits have improved environmental management.

3. Better Description of Project Effects on Downstream Zooplankton

On page 5-60 of the EIR, there is an attempt to explain downstream changes in zooplankton communities and abundance. The Agency did not find the explanation convincing. More work is required including, possibly, some further research and analyses to more adequately determine the reasons behind the changes, and additional description of potential mitigative measures, if necessary.

Other Comments

1. Presentation of Environmental Impact Statement (EIS) Predictions

The Agency found that the comparison of the significance of residual effects presented in the EIR to the predictions in the Environmental Impact Statement (EIS) is not accurate. The EIR authors appeared to stretch the limited results of some monitoring programs to draw conclusions that some residual effects are negligible in nature.

To illustrate the first point, we offer the following examples:

- The EIR report acknowledges that caribou are more likely to be seen farther than nearer the mine, indicating that the mine may be having an effect (pg. 5-80). The report also states that this was predicted in the 1995 EIS (pg. 5-84). We reviewed the EIS and could not find such a prediction. We did locate the following:
 “With appropriate mitigative measures in place, caribou will be largely unaffected by the NWT Diamonds Project. Based on caribou response to development elsewhere, the overall impact on caribou of the NWT Diamonds Project is expected to be minor.” [Vol. IV, pg.31]
 One would have to conclude that the observed effect of caribou more likely being found farther away from the mine site was NOT predicted, and should not be construed as a predicted effect by BHPB.
- The EIR states that a cumulative effects study of mining development on grizzly bears demonstrated a negative response to mines and other developments, and that this is consistent with the EIS prediction that Ekati would likely cause fragmentation of bear habitat (pg. 5-89). We have reviewed the EIS and could find no prediction that this would happen at Ekati. However, we found the following quote regarding predictions for grizzly bear habitat:
 “The NWT Diamonds Project will not remove or significantly alter cover important to grizzly bears.” [Vol. IV, pg.31]

One would have to conclude that the observed effect was NOT predicted, and should not be construed as a predicted effect by BHPB.

- The EIR states that the EIS predicted that collisions would likely happen between bears and vehicles (p.5-90). We could find no such prediction in the EIS. The EIR notes that there have been no collisions recorded, and concludes that BHPB's mitigation measures are effective. We do not believe that this conclusion can be drawn.
- The EIR states that the EIS predicted that wolverines may be attracted to landfills. The EIS makes no such reference to landfills, although it does state that "wolverine may be attracted to camps and human activity, becoming nuisances by breaking into buildings and consuming food." Wolverine being attracted to landfills is an unpredicted impact and should be as such. The unpredicted effect helps explain why five wolverines had to be destroyed in the 1998-2001 period.
- The EIR states that the one raptor-vehicle collision recorded is 'consistent with a prediction made in the EIS of collisions between vehicles and raptors' (p.5-96). We could find no reference to this in the EIS. On the same page in the EIR, it also notes that vehicle-related mortalities for waterfowl were predicted in the EIS. Disturbance from fixed-wing and helicopters is a potential impact identified in the EIS for waterfowl, but collisions with vehicles are not identified.

To illustrate the second point above, we offer the following:

- Even though ambient air quality modeling, and more importantly monitoring, has not taken place to help determine compliance with standards and guidelines and any residual effects, BHPB concludes that there are negligible residual effects.
- Contrary to the Table 6.2.1 assertion of a negligible residual effect from Ekati on zooplankton communities, it should actually be stated that these effects are uncertain. The Company's own significance rating system states that "negligible" means that residual effects impact a small group of organisms for less than one generation. The Agency is aware cladocera have been depressed in Moose and Nema for several generations (cladocera produce at least one generation per year). Without quantitative analysis of changes in the zooplankton community, BHPB's qualitative assessment as "negligible residual effects" is overconfident at best, faulty at worst.

2. Accurate Use of Terminology

The Agency noted several inconsistent and inappropriate examples of environmental policies, research and mitigative measures presented in the EIR as "monitoring". For example, the Land Disturbance Policy noted in section 4.2.3 is not a monitoring program but a review mechanism. The reclamation monitoring described in section 4.2.3.3 is really a description of progressive reclamation (a regulatory requirement) with very little on how these activities were evaluated for success through monitoring.

3. Limited Description of Reclamation Research

The Agency noted the helpful but brief descriptions of a few revegetation studies in the EIR. We look forward to a full and comprehensive description of reclamation research in the Interim Closure and Reclamation Plan. We expect that the past and current research will be clearly linked to information needs, mitigative measures, monitoring and other essential components of the Plan, including timelines.

4. Environmental Audit Improvements to Environmental Management

The Agency found the presentation of the number and types of internal audits performed helpful as shown in Table 4.2-3. We believe that BHPB missed a very important opportunity to demonstrate environmental leadership by summarizing the audit outcomes. This could be done through a short discussion or list of improvements to environmental management as a result of these audits.

5. Permafrost Monitoring

The EIR states that the company is monitoring vegetation based on TK, to indicate changes to permafrost. A better description of this monitoring and the contributions of TK should be provided.

6. Compliance with Ambient Air Quality Standards

The EIR erroneously draws the conclusion that the air emissions from Ekati meet ambient air quality standards based on the results of snow and lichen sampling. This type of monitoring is not a substitute for ambient air quality modeling or monitoring. The Agency has drawn this fact to the attention of BHPB in a lengthy letter dated May 8, 2006.

7. Flawed Significance Ratings and Conclusions

The Agency noted that there are differences between the significance criteria presented in the EIR and those used during the environmental assessment (as submitted by BHP as part of the Additional Information to the Panel). Specifically, the geographical extent (“ecozone”, “ecoregion” and “ecosection”) have been removed from the table used in the EIS “*Ratings used for the significance of residual effects in the impact assessment matrix*”. Furthermore, there are logical flaws in the significance criteria presented in the EIR. If there are logical flaws in the criteria for residual effects, some of the conclusions reached in the EIR on the significance of residual effects may be uncertain at best.

The Agency also noted that even where there are important research efforts under way by the company, for example, the work on the toxicity of vegetation use in reclamation, the significance is almost always noted as negligible. It would be far more appropriate to indicate that the residual effects are uncertain or unknown until appropriate studies and research are concluded.

8. Flawed Example of Positive Residual Effects

The EIR concluded that at least two project residual effects are positive, the development of permafrost in the waste rock piles, and progressive reclamation. These two examples are clearly not residual effects but mitigative measures. We further note that the removal of Leslie Lake from the mine plan (as presented in Table 6.2-1) as an example of a mitigative measure for land disturbance is questionable. We have always understood that Leslie Lake pipe was removed from the mine plan as a result of its poor economic potential rather than a conscious effort by the company to limit its land disturbance.

We note too that BHPB states that it has a Land Disturbance Policy and the Agency would like to receive a copy of this document.

We would be pleased to discuss these concerns with BHPB and others, should such an opportunity present itself.

Sincerely,

-ORIGINAL SIGNED BY-

Bill Ross
Chairperson

cc. Society Members