



Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada
Box 1500
Yellowknife, NT X1A 2R3

November 2, 2007

Your file *Votre référence*

Our file *Notre référence*

Mr. Ricus Grimbeek
President and Chief Operating Officer
BHPBilliton, Ekati Diamond Inc.
#1103 4920-52nd Street
YELLOWKNIFE NT S1A 3T1

Dear Mr. Grimbeek,

**Re: Minister's Report on the BHPBilliton, Ekati Diamond Mine 2006
Environmental Agreement and Water Licences Annual Report**

Indian and Northern Affairs Canada (INAC), the Government of the Northwest Territories Environment and Natural Resources (GNWT-ENR), the Independent Environmental Monitoring Agency (IEMA) and the Aboriginal Parties have reviewed the Annual Reports pursuant to Article V section 5.1 of the Environmental Agreement. We are providing the following comments and attachments accordingly.

Section 5.1 (f) requires that "within sixty (60) days of the receipt by BHPBilliton of the Minister's Report, BHPBilliton shall reply to the Minister's Report and provide the Minister with a revised Environmental Annual Report which addresses satisfactorily the deficiencies described in the Minister's Report."

Following the advice from the Deputy Minister of the Government of the Northwest Territories (GNWT-ENR), the Annual Environmental Report is deemed unsatisfactory (Attachment 1).

INAC, Environment Canada, Independent Environmental Monitoring Agency, Department of Fisheries and Oceans, have not identified any additional issues related to the Minister's Report. However, we have some concerns in (Attachments 2, 3, 4, and 5) and request that BHPBilliton consider addressing these items in the revised Annual Report. As a point of clarification, items mentioned in these four attachments are not part of the Minister's Report.

Canada

As a first step, I suggest that BHPBilliton and the Government of the Northwest Territories meet to discuss their comments on the Annual Report as suggested by GNWT-ENR. We look forward to working with the parties on the revised Annual Report.

Please contact Mr. David Livingstone, Director of Renewable Resources and Environment at 669-2637 for further details.

Sincerely,

Trish Merrithew-Mercredi

Trish Merrithew-Mercredi,
Regional Director General
Northwest Territories

Encl.: GNWT-ENR- Attachment 1
Environment Canada- Attachment 2
Independent Environmental Monitoring Agency- Attachment 3
Department of Fisheries and Oceans- Attachment 4
Indian and Northern Affairs Canada- Attachment 5

C.c. R.P. Bailey, Deputy Minister, GNWT-ENR
Dr. Bill Ross, Chair, Independent Environmental Monitoring Agency
Mr. Carey Ogilvie, Head, Environmental Assessment-North, EPO
Mr. Ernie Watson, Habitant Team Leader, Department of Fisheries and Oceans
Ms. Laura Tyler, Manager, BHPBilliton
David Livingstone, Director, Renewable Resources and Environment
Annette Hopkins, Director, Operations
Carolyn Relf, Director, Mineral Development and Petroleum Resources
Grand Chief George Mackenzie, Tlicho Government
Chief Addie Jonasson, Lutselk'e First Nation
Chief Peter Liske (Dettah), Yellowknives Dene First Nation
Chief Fred Sangris (Ndilo), Yellowknives Dene First Nation
Bill Enge, President, North Slave Metis Alliance
Donald Haviyok, President, Kitikmeot Inuit Association
Zabey Nevitt, Executive Director, Wek'eezhii Land and Water Board



OCT - 5 2007

Ms. Trish Merrithew-Mercredi
Regional Director General
Indian and Northern Affairs Canada
4914-50th Street, Bellanca Building
P.O. BOX 1500
YELLOWKNIFE NT X1A 2R3

Dear Ms. Merrithew-Mercredi:

Environmental Agreement Article 5.1(c)
BHP Billiton Diamonds Inc.
Environmental Agreement and Water Licenses Annual Report 2006

In accordance with Article 5.1(c) of the Environmental Agreement between the Government of the Northwest Territories (GNWT), Indian and Northern Affairs Canada (INAC) and BHP Billiton Diamonds Inc. (BHPB), I am writing to inform INAC that the GNWT Department of Environment and Natural Resources (ENR) has reviewed BHPB's Environmental Agreement and Water Licenses Annual Report 2006 (the Annual Report) and, similar to our findings following the review of the 2005 version of the same report, find that data and information related to air quality is inadequate and lacking. As well, ENR finds that despite constructive correspondence with BHPB since our review of last year's Annual Report, BHPB has not adequately consulted the signatories to the Environmental Agreement (EA). For these reasons, ENR concludes that the Annual Report is unsatisfactory. Our reasons for drawing this conclusion are discussed in detail below.

Air Quality

Article 5.1(a)(iii) of the EA requires BHPB to include results and findings of environmental monitoring programs in the Annual Report. Article 7.2(h) and (i) of the EA specifically identifies "ambient air quality" and "stationary emissions sources" as components of an environmental monitoring program.

The inadequacies of BHPB's Air Quality Monitoring Program have been documented previously in ENR's review of the 2003-2005 Environmental Impact Report (BHPB 2006) and the 2005 Annual Report (BHPB 2006). ENR was initially encouraged by the response to our review of the 2005 Annual Report by BHPB, with a letter dated December 7, 2006 and the Proponent's submissions of the required air emissions reassessment and modeling report.

.../2



However, no further consultation has occurred despite ENR's and Environment Canada's (EC) favourable review of this report and offer to work with the Proponent on developing an acceptable Air Quality Monitoring Program (letter dated February 13, 2007).

Consequently, BHPB's Air Quality Monitoring Program continues to generate inadequate data and this year's Annual Report thus falls short of expectations. There is in fact, no data to report on since neither of the Total Suspended Particulate samplers operated in 2006 (according the section on TSP, Appendix S, page 2).

The discussion in Appendix S of the Annual Report indicates that BHPB has a poor understanding of the basic concepts of air quality monitoring. The third paragraph (page 1) discusses the proposed "Continuous Air Monitoring station" and indicates that the station will be used for "future source emission monitoring" and to prepare submissions to the National Pollutant Release Inventory (NPRI) and Greenhouse Gas reports. Air quality monitoring will track the impacts of emissions but will not measure the emissions themselves as required for NPRI calculations. The pollutants identified earlier in the paragraph as being monitored by the station are not greenhouse gases, so it is not apparent how this will help with greenhouse gas reporting.

The fourth paragraph (page 1) indicates that the location for the monitoring station has been decided by the Proponent. However, it was ENR's understanding that the selection process would involve consultation with EC and ENR. Similarly, the discussion under Total Suspended Particulate (TSP) Measurements (page 2) indicates that the TSP sampling station TSP-1 will be relocated to Cell B.

The discussion under Air Quality Modeling (page 4) indicates that the modeling report referenced earlier predicted exceedences of Northwest Territories particulate standards, but offers no discussion of how the Proponent proposed to address the issue (e.g. mitigation options and/or monitoring).

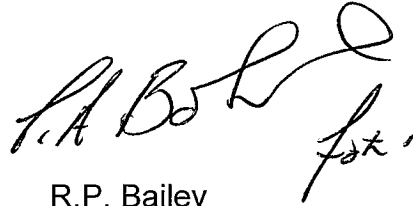
Consultation

As in previous years, a draft of the Annual Report (BHPB 2007) was not circulated for review by signatories to the EA.

ENR believes that there is an obligation created through the EA that BHPB will consult with representatives of INAC, the GNWT and the Independent Environmental Monitoring Agency (the Agency) as information and data to be included in the Annual Report is compiled. When this practice is incorporated into the process of preparing the Annual Report, we are confident that many of the issues raised in this review and last year's review can be resolved, thereby avoiding the formal Minister's Report process as enabled by the Agreement.

We look forward to working with BHPB on these monitoring programs in a timely and progressive manner.

Sincerely,

A handwritten signature in black ink, appearing to read 'R.P. Bailey', with a stylized flourish extending from the end of the signature.

R.P. Bailey
Deputy Minister

ATTACHMENT #2



Environment Canada
Environnement Canada

Environment Canada
Prairie and Northern Region
Suite 301, 5204 - 50th Ave
Yellowknife, NT X1A 1E2

October 2, 2007

Our file: 4780 005 120

Lionel Marcinkoski
Environmental Scientist
Environment & Conservation
Department of Indian Affairs and Northern Development
Box 1500,
Yellowknife, NT X1A 3R2

By email

Re: Ekati Diamond Mine 2006 Annual Report

On behalf of the Environment Canada (EC) Jody Klassen (Environmental Assessment Specialist) and I have reviewed the document titled "Environmental Agreement and Water Licences Annual Report 2006" submitted by BHP Billiton Diamonds Inc. and dated April 2007. The following comments are offered for your consideration:

The Annual Report provides the required materials listed in Section V of the Environmental Agreement (with the exception perhaps that some of the materials, such as the INAC inspection reports, are cited as being available online) and documented that there were no outstanding compliance issues. Overall, EC finds the Annual Report to be satisfactory, but notes that in several cases, remedial and/or mitigative actions are still outstanding or could be further developed as noted below.

Long Lake Containment Facility

The aquatic effects monitoring program continues to document changes within the watershed in terms of increased metals, ions, and nutrients both in the cells and downstream. BHPB has been undertaking water quality studies to better understand the bio-physical relationship of their effluent and the geology, and to update predictions for water quality changes. Results of this work have been promised for some time now, and EC strongly encourages BHPB to complete this report.

King Cujo Watershed and Lac du Sauvage

Cujo Lake: The permitted release from the King Pond Settling Facility is reported to contain concentrations of regulated parameters that are below CCME Water Quality Guidelines for Freshwater Aquatic Life; and so no negative effects were expected. However, four biological changes are reported, two of which involved reduced diversity. No explanation is offered, and it would be useful to have an evaluation of the potentially relevant water quality changes and other factors (e.g. climate) which may account for the changes observed.

Editorial Notes

- Page 15: table reports an annual total of 53m³ of Sewage Sludge removed to the Panda Waste Rock Pile, while the paragraph in section h reports a total of 50m³ of sludge that went to Zone S in the Panda Waste Rock Pile.
- Page 16/19: SNP site 1616-26 should be sampled 2x a year (page 16 -Water Licence MV2003L2-0013) but the summary table on page 19 shows that the site was only sampled once.
- In Appendix C, page 8, the summary of acid base accounting results provides a range of values for each rock source. It would be helpful to include the standard deviation for these.

Accidental Spills and Releases

There are numerous spills and accidental releases of hydraulic oils and lubricants, and the majority of the releases were due to "hose rub-through" or breaking parts. An adaptive management approach would suggest that their routine equipment inspection and maintenance schedules get a second look to reduce the frequency of spills, and such further action should be noted in the Annual Report.

Air Quality

Appendix S provides a summary of the 2006 Air Quality Monitoring Program, and includes emissions calculations, greenhouse gas calculations, a summary of air quality modeling work done and results for a limited number of measurements of total suspended particulates. As noted in previous correspondence, Environment Canada has serious concerns with the lack of ambient air quality monitoring at the site. It is our understanding that air quality monitoring equipment was purchased last year, but that it has not been installed yet. Implementing the monitoring program was to have been done in consultation with EC and with the GNWT, but there have been no discussions to date. EC strongly encourages BHPB to initiate discussions with EC and the GNWT on the ambient air quality monitoring program, and to initiate monitoring this year, as this has been outstanding for much too long.

Please do not hesitate to contact me at (867) 669-4735 or by email at anne.wilson@ec.gc.ca with any questions or comments regarding the foregoing.

Yours truly,

Anne Wilson
Water Pollution Specialist
Environmental Protection Operations

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO)
Dave Fox (Air Issues Specialist, MSC)
Jody Klassen (EPOD-Edmonton)
Graham Veale (Air Specialist, ENR-GNWT)

ATTACHMENT # 3



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

P.O. Box 1192, Yellowknife, NT X1A 2N8 • Phone (867) 669-9141 • Fax (867) 669-9145
Website: www.monitoringagency.net • Email: monitor1@yk.com

October 5, 2007

David Livingstone
Director, Renewable Resources and Environment
Box 1500
Yellowknife NT
X1A 2R3

Dear David

The Agency has had an opportunity to review BHP Billiton's (BHPB's) 2006 Annual Environmental Report and the plain language summary. While reviewing these documents, we were also mindful of the full Wildlife Effects Monitoring Program (WEMP), Aquatic Effects Monitoring Program (AEMP) and Panda Diversion Channel (PDC) monitoring reports for 2006.

The Agency is of the view that the 2006 Annual Environmental Report is satisfactory and that the information provided is adequate, including the description of remedial actions taken or proposed in respect of impact or compliance problems.

The Agency makes the following observations, some with a view to improving future Annual Reports:

- Page 3 describes several internal and external audits and certifications of Ekati and it would have been even more helpful to summarize the improvements in environmental management resulting from these activities.
- The communication and external outreach section 3, on page 8, is a useful addition, although further details on issues raised and actions taken arising from community meetings and other communication activities would be helpful to document.
- Page 10 includes information on the fisheries authorizations which is a helpful addition in this year's report.
- The text on page 52 perpetuates the error the Agency identified in the Environmental Impact Report 2006, where mitigation measures (permafrost growing into waste rock piles and revegetation success on disturbed sites) are wrongly identified as positive effects of the mine.

- Page 59, lists and abstracts of all environmental plans and programs are required by the Environmental Agreement but it is not clear if all of these have been included in this year's Annual Report.

The Agency has also submitted a set of minor editorial corrections and questions regarding the 2006 Annual Environmental Report directly to BHPB.

We would be pleased to discuss these comments with BHPB and others to ensure improved public reporting and environmental management at Ekati.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Ross". The signature is fluid and cursive, with the first name "Bill" and last name "Ross" clearly distinguishable.

Bill Ross
Chairperson

cc. Society Members
Zabey Nevitt, Wek'eezhi Land and Water Board



Fisheries
and Oceans

Pêches
et Océans

Fish Habitat Management
Suite 101, 5204-50th Avenue
Yellowknife, Northwest
Territories
X1A 1E2

Your file *Voire référence*

Our file *Notre référence*

6.2.3

October 10, 2007

Lionel Marcinkoski
Environment & Conservation
Indian and Northern Affairs Canada
4914-50th Street, 10th Floor Bellanca Bldg, Box 1500
Yellowknife, NT X1A 2R3

**RE: BHP Billiton (BHPB) 2006 Environmental Agreement and Water
Licence Annual Report**

Dear Lionel:

As requested, the Department of Fisheries and Oceans, Fish Habitat Management – Western Arctic Area (DFO) has reviewed the 2006 annual report submitted by BHPB in order to determine whether it is satisfactory or not. DFO's review focused on those areas of the annual report that are related to fish and fish habitat.

DFO finds the annual report to be generally satisfactory. However, there are biological changes identified in the AEMP summary (Appendix F) that DFO would appreciate clarification on:

Koala Watershed and Lac de Gras

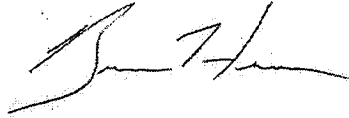
The proportion of cladocerans in the zooplankton of Moose Lake has decreased.

King-Cujo Watershed and Lac du Sauvage

- decreased zooplankton diversity (Cujo Lake);
- increased shallow depth lake benthos density (Cujo Lake)
- increased mid depth lake benthos density (Cujo Lake); and
- decreased stream benthos dipteran diversity (Cujo Outflow)

While these changes were noted in the AEMP summary, no explanation was provided as to why they might be occurring and if further monitoring was being planned to determine if the changes were due to the mine operations.

If you have any questions, please contact me at (867) 669-4931.

A handwritten signature in black ink, appearing to read "Bruce Hanna". The signature is fluid and cursive, with the first name "Bruce" and the last name "Hanna" clearly distinguishable.

Bruce Hanna
Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans- Western Arctic Area

ATTACHMENT # 5



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

Water Resources Division
3rd Floor Bellanca Building
PO Box 1500
Yellowknife, NT

File: MV2002L2-0013 and
MV2001L2-0008
BHPB EKATI

October 19, 2007

To Lionel:

Re: **Review of the BHPB Annual Report 2006**

Indian and Northern Affairs Canada - Water Resources Division (INAC-WRD) has reviewed BHP's Annual Report for 2006 under water licences MV2002L2-0013 and MV2001L2-0008. INAC-WRD offers the following comments.

In general the annual report is comprised mainly of summaries with very few of the actual numbers provided. It is understood that a report including all of the individual reports would be an unmanageably large report. However, the inclusion of a few CD's containing the reports would be beneficial as it would prove much easier to conduct a proper review.

Overall the 2006 Annual Report is satisfactory. Note the following comments are provided based on existing issues identified at the site over the years.

Appendix B: Seepage Survey

SEEP-019 continues to show 'Fluctuating aluminium concentrations and pH levels overtime'. Considering that this has been an issue for several years, there does not appear to be any discussion in regards to determining the cause, effect and possible solutions of these low pH readings.

Appendix C: Geochemical Characterization and Metal Leaching Management Plan (former Acid/Alkaline Rock Drainage Plan)

The opening paragraph in Appendix C states that 'As the EKATI Diamond Mine does not have ARD issues, this plan's name was changed to the Geochemical Characterization and Metal Leaching Management Plan.'. Although the neutralizing potential of the rock is high, which indicates the potential for ARD is low, there are some disturbing pH values from SEEP-019. Granted the pH has been increasing at SEEP-019 since 2004, only the most recent value has met the

discharge parameter. Therefore, until the fluctuating values can be explained it is difficult to say with certainty that ARD is or is not occurring.

The paragraph titled Assessment of Potential for ARD in Processed Kimberlite (p-2) states that 'Although processed kimberlite is not potentially acid generating due to its high carbonate content, waters resembling ARD containing elevated TDS have found adjacent to the Course Kimberlite Reject (CKR) Storage Area.' It is unclear what is meant by waters resembling ARD.

I would like to thank the staff at BHP for promptly addressing some of my questions and concerns in preparation of this letter and encourage a continued dialogue on these issues. If you have any questions and/or comments feel free to contact Marc Casas at (867) 669-2664 or via email at casasm@inac-a-inc.gc.ca.

Sincerely,



Dr. Kathleen Racher
Manager
Water Resources Division