

**Independent Environmental Monitoring Agency
80th Meeting of the Board of Directors
Yellowknife, NT
December 5-6, 2012
Summary of Discussion**

Directors

Bill Ross
Tim Byers
Jaida Ohokannoak
Tony Pearse
Kim Poole
Laura Johnston
Arnold Enge

Staff

Kevin O'Reilly, Executive Director
Allison Anderson,
Communications and Environmental Specialist

December 5, 2012

Meeting commenced at 9:00 a.m.

AGENCY BUSINESS

➤ **Information Updates**

Bill – Attended the 2012 Environmental Impact Report (EIR) public meeting in November. Discussed the sale of the Ekati Diamond Mine with Eric Denholm (BHP Billiton).

Laura – Attended the water licence technical session in October. Continued to review the water licence renewal application. Reviewed parts of the 2012 EIR. Participated in a meeting in December with staff from BHP Billiton, Wek'èezhì Land and Water Board (WLWB), Aboriginal Affairs and Northern Development Canada (AANDC), Government of the Northwest Territories (GNWT) and the Agency regarding the financial security review.

Tim – Attended the water licence technical session in October and responded to an information request from the meeting, which he copied to the WLWB and Golder Associates (BHP Billiton consultant). Provided a summary of the technical session to the Yellowknives Dene First Nation and Lutsel K'e Dene First Nation. Attended the 2012 EIR public meeting in November. Responded to questions from the Lutsel K'e Dene First Nation about what the Agency has learned about total suspended solids and fine processed kimberlite.

Jaida – Reviewed the 2011 Air Quality Monitoring Program (AQMP) report and parts of the 2012 EIR. Helped review communications projects. Monitored the Agency's finances.

Tony – Reviewed documents relating to the water licence review proceeding, specifically those pertaining to effluent quality criteria (EQC). Followed the discussion around the financial security review.

Kim – Reviewed the 2012 EIR. Continued to work on various wildlife issues.

Arnold – Attended the water licence technical session in October. Attended the aquatic monitoring program workshop sponsored by AANDC in December.

Kevin – Helped coordinate and submit the Agency’s comments on the water licence renewal application. Submitted the Agency’s comments on the 2012 EIR and BHP Billiton’s 2011 annual report in advance of the deadline. Attended the water licence technical session in October and prepared a meeting summary. Attended the 2012 EIR public meeting in November and prepared a meeting summary. Spoke to Nicole McCutcheon (Department of Environment and Natural Resources, GNWT) about cumulative effects. Participated in the financial security review meeting in December.

Allison – Attended the 2012 EIR meeting in November. Prepared and distributed brief summaries for the 78th and 79th Board meetings. Prepared and posted a summary of discussion for the 79th Board meeting. Prepared a summary of discussion for the Environmental Agreement implementation meeting in June. Updated the annual report mailing list. Prepared an accounting of funds for communications projects. Continued to reorganize the Agency office. Assisted in preparing for the Christmas open house. Arranged for new office equipment, internet and phone services. Arranged travel and/or accommodations for Agency Directors and community representatives to attend Agency meetings in December. Arranged translator, equipment and catering and prepared information packages for the Agency’s 2012 annual general meeting (AGM). Prepared correspondence table, calendar and binders for 80th Board meeting. Attended the Northwest Territories Geoscience Forum.

➤ **Financial Report**

Kevin reviewed the 2011-12 Year-to-Date Expenditures and Variance Report. The Agency has under-expended on Board meetings and site visits this year. The water licence application review process likely will lead to the full expenditure of the Separate Fund. The Agency has reviewed BHP Billiton’s annual report, 2012 EIR as well as reports on the AQMP, Aquatic Effects Monitoring Program (AEMP), Panda Diversion Channel and Wildlife Effects Monitoring Program. There may be a need for a small addition of funds for outside contracts, as the Agency may hire a third party to review the 2011 AQMP report. The Agency expects to fully expend its communications budget this year. The Agency may need to put a small additional amount into management and administration due to salary and benefit changes and having a full complement of staff.

➤ **Communications Update**

Allison – Continued to update and improve the website. Updated and made changes to the Ekati Timeline website. Reviewed the Agency’s 2012 AGM presentation. Began preparation of the new issue of *The Ekati Monitor*. Prepared and distributed follow-up letters and a brochure on the Agency’s visit to Whatì. Contacted southern printers, ordered and began distribution of the Agency poster in six languages. Ordered new promotional items. Worked with a recording studio and translator to complete the last sound file.

Action Item # 1: Kevin to contact the Agency’s current website host service requesting the long promised changes to the website software. If there are no changes, staff will look elsewhere for a better host service.

FOLLOW-UP ITEMS

➤ **Water Licence Renewal Application**

Technical Session (October 22-23)

Agency Directors and staff attended a helpful technical session on the water licence renewal application on October 22-23, 2012.

In its water licence renewal application, BHP Billiton proposes to change some wording of its water licence. The company would prefer for the water licence to be less prescriptive than it is currently. It has said that prescriptive terms for the AEMP should not be included in the water licence so that the company can have greater flexibility to review the program. However, the Agency believes these prescriptive terms belong in the water licence. Ultimately, it is a matter for the WLWB to decide.

The Agency is pleased that the company will be conducting a review of the water quality data for the Cujo Lake watershed to see if there are any contaminants of potential concern and whether they might be regulated as EQCs.

BHP Billiton proposes to eliminate arsenic, copper, nickel, BOD (biochemical oxygen demand) and ammonia as EQCs for the Koala-Slipper Watershed and that potassium be added as an EQC. The company would prefer that other contaminants of potential concern, such as nitrate, be managed through a Response Framework.

The impacts of changing water quality downstream of the mine were also discussed, including changes in plankton communities. BHP Billiton has agreed to submit its three-year AEMP review ahead of schedule so that any further trends and analysis are available before interventions are to be filed.

A large number of information requests flowed from the technical session and BHP Billiton filed responses just before the Agency Board meeting. Further review of these responses is required by the Agency.

Agency Intervention and Participation in Public Hearing

If possible, the Agency will prepare and distribute its intervention to Aboriginal Society Members in advance of the January 7 deadline. The Agency will give a presentation on its recommendations at the public hearing scheduled for February 12-13, 2013.

AANDC now has some funds available to hire an expert to review the SSWQOs (site specific water quality objectives) for nitrate, chloride and sulphate, although it is not clear if the expert will be at the hearing.

The Agency has identified nitrate, and possibly chloride and molybdenum, as contaminants of concern that may warrant regulated variables for the Koala-Slipper watershed. Options for dealing with these substances were discussed, including source reduction, management under the Response Framework or regulation as an EQC.

It was agreed that Laura, Tim and staff will represent the Agency at the public hearing. Laura will take the lead in drafting the Agency intervention. Every effort will be made to file it before the Christmas holidays.

Action Item # 2: Laura, Tim and staff to represent the Agency at the Ekati water licence renewal public hearing. The Agency's intervention to be drafted by Laura for submission by December 20, 2012.
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➤ **Nitrate SSWQO Discussion Follow-up**

The Agency sent a letter to BHP Billiton on its early adoption of the SSWQO for effluent discharge from the LLCF. The Agency has not yet received a response from the company.

➤ **Financial Security Review**

The Agency attended a December 3 meeting called by BHP Billiton to discuss financial security for Ekati. The company is unsure as to what the RECLAIM model actually covers and what should be included in the reclamation liability estimate. It was apparently waiting for the recent Diavik process to provide some greater clarity and for the response from AANDC to questions from the WLWB on RECLAIM. The company appears to be waiting for further instructions. All the other parties at the meeting strongly encouraged BHP Billiton to complete its reclamation liability estimate using RECLAIM based on what is in the approved *Interim Closure and Reclamation Plan*.

AANDC indicated that it will not be preparing its own cost estimate, but will review what BHP Billiton produces. AANDC also said that there may be a need for additional financial security from matters covered in the Environmental Agreement as was the case for Diavik. Stratos Consulting assisted with this process for Diavik and may be used for the Ekati financial security review. The AANDC staff at the meeting undertook to advise everyone as to how far along the review of the BHP Billiton Environmental Agreement has proceeded. AANDC provided some reassurance that there would be no overlap and that a global estimate should be prepared based on the *Interim Closure and Reclamation Plan* while the split between the water licence and Environmental Agreement would be open to further discussion.

It is not clear if and when BHP Billiton will complete and circulate a reclamation liability estimate using RECLAIM. At the meeting, the company was strongly encouraged to move forward on this. There had been virtually no progress in the last year and the process now appears to be backing into the water licence renewal, where a new number for financial security will be required.

➤ **2009-11 Air Quality Monitoring Program Report**

The Agency received the 2011 AQMP in June 2012. There have been some major improvements over the 2008 AQMP, including improved snow and lichen sampling. However, other air quality monitoring continues to be problematic, including ambient air quality and high-volume sampling.

Equipment failures and staff training continue to be issues of concern to the Agency. Two sets of methods appear to draw different conclusions about air quality at Ekati – ambient air quality monitoring shows total suspended particulates are increasing, whereas high-volume sampling indicates the air quality is improving. The main meteorological station was not working on several occasions, even for months, due to power failures. The Agency finds this unacceptable. The GNWT has said the target for data collected from high-volume sampling and other air quality sampling methods is 75 percent. BHP Billiton reported in its 2012 EIR that it will begin using a different kind of monitoring equipment, partisols, and is considering a telemetry system to reduce equipment failures. The company is also committed to providing better training to staff.

Temperatures appear to be getting warmer, which meant the company used less fuel in 2009-11 but these were also relatively mild winters. The Agency has asked BHP Billiton about the effectiveness of their greenhouse gas reduction programs, but there do not appear to be concrete conclusions.

Prior to 2010, BHP Billiton used water to control road dust. It now uses DL-10. The British Columbia air quality standard on Fox Road was exceeded twice in 2009-11. In the 2008 AQMP report, it was identified that helicopters were causing a lot of the dust. BHP Billiton said it would resolve this issue, but the problem continues.

The methodologies used for lichen and snow sampling are satisfactory to the Agency, except that the distance from disturbances is measured to the mine administration building. It should be measured to the nearest dust source (e.g., to the edge of the mine footprint, roads or pits). The comparison of snow

sampling methods was inconclusive. A very detailed analysis was done of lichen sampling. Concentrations of certain contaminants in lichen tissues have increased, including nitrogen.

It was agreed that the Agency will ask SENES Consultants to review the 2011 AQMP to ensure that recommendations made by the Agency in the past have been implemented.

Action Item #3: Kevin to approach SENES to review the 2011 AQMP report.

➤ **Whati Community Visit**

The Agency was pleased with its visit to Whati. There is still a need to write a follow-up letter to the AANDC, GNWT and BHP Billiton with the community concerns that we heard during the Agency's open house in Whati.

Action Item #4: Kevin to draft a follow-up letter on the community concerns heard by the Agency during the September 2012 visit to Whati.

➤ **DL-10 Effectiveness Letter**

BHP Billiton recently submitted a letter to the WLWB outlining the effectiveness of DL-10 in controlling road dust at the mine. The Agency believes BHP Billiton's analysis of DL-10's effectiveness is inadequate. Data from dust fall monitors and other scientific evidence should be used to evaluate its effectiveness rather than a couple of photos taken with no reference to any control or weather conditions. The Agency will respond to the company's letter in the context of the 2011 AQMP report.

➤ **AANDC Inspection Capacity**

The AANDC response to the Agency's letter expressing concern with the declining frequency of mine inspections at Ekati was reviewed. The Agency remains concerned about the declining inspection frequency and capacity within AANDC. To be clear, the Agency has great confidence in the current inspector but wishes he had more time to carry out his duties with regard to Ekati.

➤ **NIRB Request for Comments on MMG Izok Corridor Project**

Agency Director Kim Poole declared a conflict of interest with regard to this item on the agenda due to his work as a consultant on the Izok Corridor project. He did not participate in any discussion on this item.

The Agency received a general e-mail from the Nunavut Impact Review Board (NIRB) requesting any comments on the review of MMG Resources Inc.'s Izok Corridor Project. The Agency considered this matter and it was agreed that the Agency does not have a mandate to deal with this matter.

➤ **Wildlife Camera Studies**

During the 2012 EIR public meeting, Yellowknives Dene First Nation staff asked how the company addresses caribou that pass beyond the wildlife cameras' range but that may be deflected by roads. The Agency has not seen any evidence to support BHP Billiton's conclusion in its preliminary report that roads are less than a partial barrier to animal crossings. It would be useful for the Agency to have a discussion with BHP Billiton's consultants about the purpose and objectives of the camera studies. Any further Agency review or comments on the use of cameras at site will await the next Wildlife Effects Monitoring Program report in March or April 2013.

OTHER BUSINESS

➤ Election of Executive

Following the AGM, the Directors convened in person to elect the Chair, Vice-Chair and Secretary-Treasurer.

The Board of Directors retain the Executive (Bill Ross as Chair, Tim Byers as Vice-Chair, Jaida Ohokannoak as Secretary-Treasurer) until the next AGM.

Moved by Tony Pearse. Seconded by Kim Poole. Carried unanimously.

➤ Annual Report Writing Workshop

The Agency will hold its 2012-13 Annual Report writing session near Cranbrook, BC at the St. Eugene Mission.

➤ Student Employment

The possibility of hiring an Aboriginal student was discussed in response to the suggestions made at the Agency's Annual General Meeting. There was some discussion of whether this would or could be a part-time or summer position. The Agency is not in a position to provide housing or relocation assistance. It was agreed that there should be a needs assessment and examination of net benefit to the Agency.

Action Item #5: Allison to identify options for hiring a summer or part-time employee, suitable tasks and projects and associated costs by the end of February 2013.

➤ Future Meetings

Future meeting dates were discussed. The date of future Agency Board meetings and other activities were agreed upon as follows:

- December 12, 2012 – AEMP 3-Year Review Workshop (Tim and Agency staff to attend, Laura to participate by phone)
- January 21-23, 2013 – NWT Environmental Monitoring Annual Results Workshop (Agency staff to attend and to forward presentation to Kim)
- January 2013 – Environmental Agreement Implementation meeting (date to be determined)
- March 18-20, 2013 – Agency Board Meeting
- May 7-9, 2013 – Annual Report writing workshop

Action Item # 6: Kevin to follow-up with BHP Billiton, AANDC and GNWT regarding dates for the next Environmental Agreement implementation meeting.

Meeting adjourned at 3 p.m. on December 6, 2012.



Summary of Discussion Approved by
Jaida Ohokannoak, Secretary Treasurer.