

**Independent Environmental Monitoring Agency
88th Meeting of the Board of Directors
Yellowknife, NT
December 2 & 4, 2014
Summary of Discussion**

Directors

Bill Ross
Tim Byers
Jaida Ohokannoak
Arnold Enge
Kim Poole
Tony Pearce

Staff

Kevin O'Reilly, Executive Director
Tee Lim, Communications
and Environmental Specialist

Meeting commenced at 9:00 am

AGENCY BUSINESS

Information Updates

Bill: Attended a November 4, 2014 meeting (by phone) with Kevin and Stratos on the financial securities review. Notes on the meeting were circulated. It was noted that Laura Johnston would not be able to attend the Board meeting.

Kim: Worked on preparing for his presentation on dust suppression for the Agency Environmental Workshop. Also reviewed the Lac de Gras Regional Grizzly Bear DNA Report and the Wildlife Camera Monitoring Report.

Arnold: No board business undertaken. Attended Geoscience Forum as EMAB representative, and attended Bathurst Caribou Range Plan meetings and Aboriginal caucus meetings. Will be attending Jay Project Developer's Assessment Report (DAR) information sessions next week for the North Slave Metis Alliance (NSMA).

Tim: Has been reviewing the Jay DAR Fish and Fish Habitat chapter. He has a couple methodological questions.

Tony: Did summary of research drilling program at Long Lake. As follow-up to last meeting, tasked with checking with Nathan Richea as to whether pore water in Long Lake would have an effect on downstream water quality. A memo regarding this was circulated. Also contacted an ex-banker for advice on surety bonds as a form of financial security.

Jaida: Worked with Kevin to update travel policy. Also reviewed Tee's final contract and parental leave arrangements for Jessica.

Kevin: Helped with staffing on parental leave and recruitment of a term employee. Also helped with the organization of Environmental Workshop and AGM. Kevin proofed the information brochure for the Lutsel K'e community visit. Also checked on Northern Employee Benefits Services coverage for directors, which is not possible. Helped amend travel policy to more clearly reflect what Agency covers while directors are travelling. Kevin submitted the Environmental Agreement security proposal, and also revised the proposal after noting some errors. Attended October 2nd meeting about financial security, as well as follow-up calls with Stratos October 8th and 31st. Completed submission on 2013 ICRP progress report supplemental information that the company submitted. Also made a submission on the water licence changes requiring the company to post security. The Agency shared a table at the Geoscience Forum with the Environmental Monitoring Advisory Board (EMAB) and the Snap Lake Environmental Monitoring Agency (SLEMA). He also submitted comments on the annual workplan for the exploration land use permit, and the company addressed all of our concerns. Finally, Kevin participated in a meeting with Tony and Bill December 1st on seepage and waste rock, to be reported on later in the meeting.

Financial and Variance Report

Financial projections indicate small deficit with some very conservative assumptions including DDEC submitting a number of reports in the current financial year and that the Jay Project environmental assessment remains on course with technical sessions before April 2015. The Directors were of the view that the Agency's finances can be managed to avoid an overall deficit.

Update on Staffing

Tee Lim was introduced as the new Communications and Environmental Specialist, filling in for Jessica while she is on parental leave.

FOLLOW-UP ITEMS

Jay Project

It was noted that the DAR is now out in 130 parts (including Jay dike files released very recently), and will be the Agency's major focus moving forward.

Action Item #1: The directors agreed that Bill, Tim, Kevin and Tee would represent the Agency at the Jay DAR Information Sessions in Yellowknife, December 11 and 12. Kim and Laura to participate in relevant sessions via phone.

The directors reviewed the Mackenzie Valley Review Board's schedule for the environmental assessment. Jaida indicated that she would like to attend the actual technical sessions, likely to take place in April 2015.

The Directors reviewed the budget allocations for work on the Jay Project and agreed to begin reviewing the documents over the holidays. Notes will be kept in preparation for submission of Information Requests and the technical sessions.

Action Item #2: Directors allocated the sections of the Jay DAR as follows:

- All Directors: 1 – Introduction, 2 – Project Alternatives, 3 – Project Description, any annexes that relate to directors' allocated sections.
- Jaida: 4 – Community, Regulatory and Public Engagement, 5 – Traditional Knowledge, 7 – Air Quality; to skim 14 – Maximizing Benefits and Minimizing Impacts to Communities, 15 – Cultural Aspects, Annex XVII – Traditional Land Use and TK Baseline Report
- Bill: Taking lead on 6 – Environmental Assessment Approach and 17 – Cumulative Effects Summary; to skim 11 - Vegetation
- Tim: Taking lead on 9 – Fish and Fish Habitat; also reviewing 8 – Water Quality and Quantity
- Laura: Taking lead on 8 – Water Quality and Quantity. Will recommend to rest of Board whether appendices under 8 should be reviewed by a geochemist (i.e. Don Macdonald) or whether any other particular expertise is required to review the appendices.
- Tony: 10 – Terrain
- Kim: 12 – Barren-Ground Caribou, 13 – Wildlife and Wildlife Habitat; to skim 17.8 – Barren-Ground Caribou; 17.9 – Wildlife and Wildlife Habitat, and 6 – Environmental Assessment Approach referencing Bill's notes, as well as 11 – Vegetation as it relates to 12 and 13.
- Arnold: 16 – Environmental Effects on Project

Environmental Workshop and Annual General Meeting

The Directors reviewed the logistics and preparations for the Environmental Workshop and Annual General Meeting (AGM) later in the week. It was agreed that the proposal by GNWT to change the bylaws was relatively straightforward, and in fact consistent with current practice. The question of whether 'BHPB' should be changed to 'DDEC' in the bylaws came up, and it was agreed that this issue would likely be addressed through the expected changes to the Environmental Agreement. A brief communications update will be given during the AGM. Kevin and Bill agreed to raise the question of whether there are any other communications efforts the Agency could be undertaking.

Camera Study and Grizzly Bear DNA Report

Camera Study: Kim gave his assessment where he noted a good sample size and some serious statistical work. However, there are ongoing problems with traffic counts. There are also problems with the company's claimed deflection rate of '<1%' because animals may be deflected much further out but not recorded. It was noted that the deflection rate issue would also likely come up during the Jay Project and could also be raised there too. Further clarification on the deflection rate issue will likely be raised during the Environmental Workshop.

Grizzly Bear DNA Report: Kim noted that the study was well done, had good sample sizes, and provided good baseline data. Kim felt that the study was very expensive, and pointed out that there are other good, more cost-effective designs to do such a study. Kim suggested that the actual density would be lower (than the "super-population" density) when captures are correcting for edge effect. Kim raised the question as to why no reference was made to the De Beers study in this report.

Action Item #3: The Agency will provide a comment letter to DDEC on both the Camera Study and Grizzly Bear DNA Reports.

Financial Security Review Update

Three issues: 1) Closure timeline 2) Surety bonds 3) Change to water licence that would require posting of security.

It was noted that the changes to the water licence were still with the GNWT Minister of Environment and Natural Resources. Although the Agency had attempted to schedule a meeting with GNWT staff to discuss the recently accepted new form of financial security under the water licence (surety bonds), no one was available to meet with the Directors.

Action Item #4: Kevin to finalize meeting between Agency and Carla Conkin and Robert Jenkins of the GNWT to discuss surety bonds.

There was some discussion of the GNWT's request for additional information regarding the funding requirements for the Agency to operate into the closure period for the Ekati Mine. There are clear closure activities that go on perhaps 30-40 years longer than the Agency had budgeted for in its October 2014 proposal. The Agency outlined that it was budgeted fully for 16 years but nothing had been added afterwards.

The difficulty is that the Agency has duties and obligations under the Environmental Agreement to work with and report to its Society members aside from its oversight function. Based on the Ekati Reclamation Schedule from the approved Interim Closure and Reclamation Plan, site activities are spread out over seven parts of the mine and over a 45 year period. It appears that there is a shift or drop off in site activities around 2035 and this might be reflected in a reduced level of effort on the part of the Agency in its oversight functions but not necessarily its other obligations under the Environmental Agreement. It was agreed that the Agency should propose a total of 20 years of constant operations, indexed to inflation, and then a diminishing role over time. This would require another four years of full funding beyond the current proposal and some further funding for another 25 years.

The Agency, company and GNWT have agreed to meet on the issue of Agency funding requirements during closure.

Action Item #5: Kevin, Bill and Laura to complete the Closure Timeline Submission and participate in the meeting with the company and GNWT.

Other Wildlife Issues (Misery Power Line and Zone of Influence Task Group)

At the last board meeting in September, Andrea Patenaude from the GNWT participated in a discussion on post-construction monitoring of the Misery Power Line. Andrea had invited DDEC to a meeting to discuss this issue but the timing did not work out.

Action Item #6 Kevin to follow-up with Andrea Patenaude on setting a date to discuss post-construction monitoring for the Misery Power Line.

Kim reported back on the Caribou Zone of Influence Technical Task Group work to date. He did not think it an optimal use of Agency time and budget to attend the January meeting unless there are clear objectives or an agenda. Kim agreed that if the proposed meeting took more shape and focus, he would be willing to phone in for part of it. He was satisfied with the progress and contributions to date.

2013 ICRP Progress Report and Supplemental Information

The company proposed some significant changes to the ICRP in its 2013 Progress Report. The Wek`eezhii Land and Water Board (WLWB) requested more information from the company on changing Fox pit filling and waste covers.

The WLWB has agreed with the changes to Fox pit filling but has required additional monitoring and development of action levels to protect connectivity of water flows downstream. On the waste rock covers, the WLWB has requested that the company explicitly deal with changes to ICRP objectives, not just activities. Lastly, in the 2014 ICRP Progress Report the company has to submit a revised RECLAIM estimate.

It was noted that switching Fox pit filling to the LLCF extends filling for another 10-20 years.

Cell B LLCF Drill Program

Tony reported on the memo circulated regarding the drill program, where porewater has been found to be of poor quality. Upon asking Nathan Richea about the high concentrations, he agreed but suggested there was not much flow of porewater, at least at this point, as there is no cover on the LLCF.

The company may need to re-run the LLCF water quality model, accounting for the poor porewater quality. It may also be necessary for the Fox pit water quality modelling to be updated, based on the proposed change in source water.

Action Item #7: Laura to look at LLCF water quality model in light of poor porewater quality results from the drilling program.

Seepage and Waste Rock Pile Management and Ecological Risk Assessment

Bill reported on December 1st meeting with DDEC and WLWB on Ekati seepage and waste rock management. EBA had indicated it has been seeking more information on the water content in the waste rock piles for some time now. This is essential to modelling freezing and any seepage.

In response to direction from the WLWB on responding to seepage and freezing issues, DDEC committed to do an Ecological Risk Assessment (ERA). The ERA and the thermo-modelling of rock pile are to be delivered to the WLWB by March 31, 2015.

At the meeting there was some confusion on the part of the company and its consultants on the linkage between thermal monitoring, seepage predictions, water quality and the risk assessment work. Marc Wen, consultant to DDEC, made it clear that this has yet to be sorted out.

In its response to the WLWB, DDEC stated that it would like to reduce the thickness of the waste rock cover because it believes that kimberlite is not reactive. The WLWB staff pointed out that this was a change from the ICRP and had not been approved by the regulator, and that DDEC could not simply assume this could be done.

DDEC's understanding of 'reactive' vs. 'potentially acid-generating' (PAG) is not very clear. Rock could have metal-leaching happening without being PAG, and this could be just as big an issue in terms of water quality and the ERA. Waste kimberlite can generate all sorts of things (calcium, magnesium, etc.) that can get into the water.

DDEC will submit its ERA by March 31, 2015. SLR consultants have been retained by the WLWB to conduct an independent review of waste rock and seepage management and were part of the meeting. SLR will review whatever the company and its consultants submit. All of this will be made public and made available for comment, and the WLWB will make a determination, though this will not likely be done until May-June 2015.

The Agency recommended a Traditional Knowledge component and scoping workshop with Aboriginal groups in order to help figure out what species are in the receiving environment and their relative importance. DDEC responded that it did not believe there will be time before March 31. The company committed to providing maps showing where the thermistor cables are in the waste rock piles and whether there would be any additional thermal monitoring.

There was some discussion of what is going to happen to the waste rock piles in the context of climate change. A dotted line showing the underlying topography should be added to the waste rock pile maps so that it could be established whether drainage would be running through the centre of the dumps, and where it might end up. There may be a reasonable chance that some thawing may occur. For example, Fox is not freezing, and if there is any climate change at all, will thawing occur, and what happens to any seepage.

NEW BUSINESS

Review of Revised AEMP Response Framework – due Dec 19th

It was noted that the revised document had not been reviewed by any of the Agency directors. The revised version came about from the WLWB direction to include biota, and provide a document closer to what was required in the schedule of the water licence.

Action Item #8: Tim and Laura to review Revised AEMP Response Framework before Dec 19 th .

Offer of CARC BHP NWT Diamonds Project Files

The Canadian Arctic Resources Committee (CARC) offered to donate their archival records on the BHP NWT Diamonds Project to the Agency. A preliminary file list shows that many of the documents relate to the period before and during the panel review of the project, a time period not well documented amongst the Agency current holdings. The Directors agreed to accept the offer of files, consistent with CARC's request (i.e. maintenance of public access). The Directors observed that this acquisition is timed well

in that the Agency is embarking on the development of a plan to better manage its own paper and electronic records.

Action Item #9: Kevin to draft up response to CARC, accepting its offer of the files.

Action Item #10: Tee to work on the Agency's Resource Library over the next year as part of the Agency's overall Communication Plan.

OTHER BUSINESS

Future Meetings

March 11-12, 2015: Board meeting

May 5-7, 2015: Report-writing session

Action Item #11: Kevin and Tee to work on booking meeting space and accommodation in Nelson.

Election of the Officers

Following the Agency Annual General Meeting, the Directors met again on December 4 to discuss the election of the Officers.

Bill Ross was nominated to continue to serve as Agency Chairperson, moved by Tony, seconded by Tim. Carried unanimously.

Jaida Ohokannoak was nominated to serve as Agency Vice-Chairperson, moved by Tony, seconded by Kim. Carried unanimously.

Arnold Enge was nominated to serve as Agency Secretary-Treasurer, moved by Tony, seconded by Kim. Carried unanimously.

Meeting adjourned at 5:00 pm on December 2, 2014.



**Summary of Discussion Approved by
Arnold Enge, Secretary Treasurer.**
