Independent Environmental Monitoring Agency 86th Meeting of the Board of Directors Yellowknife, NT June 12-13, 2013 Summary of Discussion

<u>Directors</u> Bill Ross Tim Byers Jaida Ohokannoak Arnold Enge Kim Poole Tony Pearse Laura Johnston (by teleconference on June 13) <u>Staff</u> Kevin O'Reilly, Executive Director Jessica Simpson, Communications and Environmental Specialist

Meeting commenced at 9:00 am.

#### AGENCY BUSINESS

#### Information Updates

Bill: Participated in two meetings on air quality by teleconference (April 21 and May 29) and met with a panel of experts (including David Schindler) by teleconference on May 22 with Kevin.

Jaida: Reviewed the Agency's plain language annual report chapters, attended a conference call with the auditor to deal with the end of year financial reports, and participated in a teleconference on air quality on April 21). Jaida also provided comments on Ekati's community engagement plan, waste management plan, and on the Agency's brochure about the community visit to Dettah and N'Dilo in March, 2014.

Kim: Attended the Northern American Caribou Conference in Whitehorse May 12-16, 2014. There was a lot of information on woodland caribou and boreal caribou. Kim also came to Yellowknife for an ENR workshop on the Zone of Influence (ZOI). The point of the workshop was for ENR to get started on some commitments they made as part of the Bathurst Range Plan meetings. Kim will help Golder put together a brief summary of research that has already been done on estimates of ZOI for caribou. Damien Panayi said that Golder did an extensive review for the De Beers Gahcho Kue Project about alternative methods to assess caribou distribution and abundance. In that review, Golder concluded that aerial surveys are the best method to determine ZOI, and satellite collars were not very effective. All other methods were essentially useless to quantify caribou distribution and abundance.

Tim: Reviewed and edited the technical and plain language annual report sections.

Lutsel K'e requested that Tim visit the community to give an update on what is happening at Ekati. However, the meeting was postponed due to the community election. Tim will be in Lutsel K'e on Tuesday June 17-18, 2014 for a Dominion Diamond Ekati Corp. (DDEC) workshop on the Jay Project. Tim will also meet with the Wildlife, Lands and Environment Committee to talk about fish and wildlife.

Arnold: No Agency business. Arnold is also a North Slave Metis Alliance Director and is involved when DDEC engages with the Impact and Benefit Agreement groups on a quarterly basis.

Tony: Was assigned to work on the Agency comments on the DDEC Seepage Report. The comments are in progress and it was noted that there is time on the agenda later in the Board meeting for this item.

Laura: Participated in the review of the draft Lynx water licence and closing comments. Laura also reviewed the draft Agency annual report and material on the Jay-Cardinal Project.

Kevin: Has been working on the annual report, we also finished Jessica's performance evaluation. With Bill, Kevin chatted with Boreal Science Panel that included David Schindler and participated in the air quality meetings on April 21 and May 29, 2014. Kevin attended the Western Mining Action Network Conference in Anchorage, Alaska in early May. The Agency submitted several sets of comments on a number of DDEC submissions including the Waste Management Plan, Community Engagement Plan, Aquatic Response Framework, and Nitrogen Response Plan. We had some success in with the WLWB, particularly on the Nitrogen Response Plan. Kevin followed up on the Cell D deposition of Fox Pit sump water. Cell D was still covered in ice, and once it is gone, DDEC will conduct the necessary water sampling. The company deposited less water than it predicted. There is an Environmental Agreement implementation meeting that is scheduled for the afternoon of June 13 that Bill and Kevin will attend. There will be no representative from the federal government attending the meeting. Kevin had a conversation with Geoff Clark, Kitikmeot Inuit Association. Geoff was looking for information on the new corporate ownership arrangement within the mining claims block. Geoff noted that KIA remains happy with the Agency but the ties are not as close as when Red Pedersen was the Chair. Kevin mentioned to Geoff that the Agency is always willing to visit with KIA to provide information and updates.

Jessica: Has been working on the Agency's plain language and technical versions of the annual report. Another newsletter is nearing completion. Jessica wrote and distributed a brochure on the last community visit to Dettah and N'Dilo in March and the Agency newsletter. She also spent some time fixing some links on the Agency's website.

### **Financial Reports**

Agency expenditures to date for 2014-15 were reviewed. The audited financial statements for 2013-14 were presented by Jaida.

The Board of Directors accept the 2013-14 Audited Financial Statements as prepared by Crowe MacKay LLP.

Moved by Tim, seconded by Kim, carried unanimously.

The auditor noted that the Agency office lease expired in 2013 and the Directors recommended that a new lease be secured for the same space.

Action Item 1: The Executive Director secure a new lease for the Agency's office space.

# **Communications Update**

The Agency website is currently hosted by Cold Mountain Computing. The Agency will be switching the host to Tamarack Computers. To do this, the website also needs a new content manager. Jessica is currently reviewing the website to see how it could be re-organized, and is accepting any suggestions from Directors and staff. Jessica would like to have the new website up and running by the end of the summer.

Tony had previously suggested that the Agency website include monitoring reports. Some of our Aboriginal Society Members also look to the Agency for copies of this report. This lead to a discussion on the use of the Agency's FTP website. Nothing about the FTP website will change, but perhaps the Agency can upload our monitoring reports and our Society Members can use it; a password is required to use it.

EMAB has a list of all of its documents on its website for people to see, and if there is something of interest, EMAB will send it to them. Jessica suggested we can do that as well, and then use the FTP website or Dropbox to send it to them.

Action Item 2: Staff to discuss options for file sharing of monitoring reports with Tamarack and proceed with any necessary changes.

# SITE VISIT

Agency Directors and staff visited the Ekati Mine site on June 11-12. Following a general orientation and a presentation on the revised Jay Project, the following areas were visited:

- The former Fay Lake spill area;
- The Long Lake Containment Facility pilot revegetation and cover study area;
- The Panda Diversion Channel widening;
- Beartooth Pit;
- A helicopter tour of the Jay and Lynx development areas;
- The Pigeon Stream Diversion;
- Old Camp and Phase I Processed Kimberlite Containment Area;
- The Misery Camp, including the Lynx Lake; and
- Fox Pit.

There were several opportunities to discuss issues with DDEC staff. DDEC staff were asked what they would do if they wanted to significantly reduce dust at the site. The response was that roads should be designed differently. For the DL10 to work properly, the top layer of gravel crush needs to be smaller than the <sup>3</sup>/<sub>4</sub> inch crush that is on the road right now, in order to form a hard crust on the road and reduce fugitive dust.

Following the site visit, the Agency discussed the issue of dust. For now, DDEC is watering the road and it seems as if this is the plan for dust suppression for 2014. The company had not yet put out the dust monitors beside the roads. It seems to the Agency that the company could have started applying DL10 and putting out the dust monitors at least several weeks ago. As soon as the snow melts, the dust monitors should be put out so there is better monitoring coverage of the summer period.

There was also some discussion of different kinds of air and dust monitoring equipment that do not require canisters or filters and that send continuous dust monitoring results through radio telemetry.

The linkages between dust monitoring and suppression efforts and wildlife effects monitoring have not been fully developed by the company. There is little regulatory oversight of these areas. Although the company has committed to studying the effectiveness of dust suppression in the summer of 2014, it is not clear what the study design actually is and how the results will be reported.

Action Item #3: The Executive Director will work with Kim and Jaida to prepare a letter requesting that DDEC clarify its plans for a dust suppression study.

#### FOLLOW-UP ITEMS

#### Lynx Project

The Ekati water licence has been amended to include Lynx Project. The Agency was not as successful as we hoped in the Lynx Land Use Permit in terms of road traffic management, air quality and road structures. The WLWB requires the company to submit a plan for road traffic management. In the closing arguments the company introduced and referenced a number of reports that had not been raised previously, which the WLWB used in their assessment. The company, however, did back down on putting Lynx sump water into the Desperation Pond.

### Jay Project

The Directors discussed the recent move by DDEC to drop the Cardinal pipe from the initially proposed Jay-Cardinal development. The spur road off of the Misery Road should be the farthest away from the isthmus, at a natural break in the esker. No data from trail surveys, collared caribou or the aerial surveys have been put together on potential crossing options. The fish habitat potential of any areas to be drained for the Jay pipe development will need to be considered. It will also be important to protect the integrity of the Aquatic Effects Monitoring Program reference lakes. This may be less of an issue now with the dropping of the Cardinal pipe and a reduced project footprint.

There was some discussion on the nature of the dykes and the water management scheme for the Jay Project during the site visit. Eric indicated that the dykes would be sufficiently impermeable so that the water can be properly managed and pumped to Lynx and then Misery. If water quality is met, the decanting of Misery Pit will begin. If not met, a water treatment facility may be needed. The seepage water from Lac du Sauvage into the Jay area will be captured before it gets into the pit. Sumps will be constructed to collect drainage. The main concerns will be focused on TSS (total suspended solids), water management, and ground water quality. The company will be using a water quality model which will include the ground water inputs, using data from Misery to predict the Jay Pit water quality, and the flows through the dyke.

The Agency will still need to pay attention to the overall mining approach for Jay Project, including dyke alignments, underground operations, and how the company evaluates all of these options. Right now, we are waiting for the revised project description; once that is submitted, it is then up to the Review Board to decide how to proceed with the review of the project. The dyke DDEC intends to build will be similar to the one at

Meadowbank, an open pit gold mine in Nunavut. Jaida mentioned that at Meadowbank, TSS was a problem because the silt curtains did not work well.

DDEC indicated that a revised project description would be submitted next week, and promised they will have the DAR completed by the end of September.

## Amendments to the Environmental Agreement

An Environmental Agreement Implementation Meeting is scheduled for the afternoon on June 13, 2014. The Agency has requested an update on any further developments with regard to the proposed changes to the Environmental Agreement.

# 2013 ICRP Progress Report

In its Reasons for Decision, the WLWB deferred the reduction of cover on the waste rock piles, the landfill capping and pit flooding because more information is required. The WLWB did agree with some of the proposed changes to the ICRP that would result in a reduction of financial security.

# Community Engagement Plan

DDEC's Community Engagement Plan was approved by the WLWB. The Agency was the only party to submit any comments on the Plan. The WLWB agreed with some of the matters raised by the Agency, but the company will only have to make changes in the next revision. It is not clear when that revision is required. The company is to get feedback from the parties on its community engagement strategies.

# **Old Camp Closure and Reclamation Plan**

The company now plans to take the processed kimberlite (PK) from Old Camp to the coarse kimberlite rejects area rather than the Long Lake Containment Facility (LLCF). The company says that trucks transporting the PK cannot get close enough to the LLCF to make dumps. There will be approximately 800 truck-loads of PK.

# Fish Sampling Protocol

The WLWB agreed with the company that there is no need to change the fish sampling methodology part of the Aquatic Effects Monitoring Program. However, DDEC agreed to improve its sampling and use of sculpins.

# Aquatic Response Framework

The WLWB has not made any decisions on the Aquatic Response Framework which would ensure that monitoring results feed into adaptive management. The company did

not agree with the Agency over our concerns around the lack of action levels for biological variables.

#### Nitrogen Response Plan

During the water licence renewal public hearing, the WLWB determined that DDEC needed to do more work on reduction of nitrogen at source. It was not clear to the Agency what if any action the company had taken on a review of DDEC's blasting practices. The Agency had concerns about the Nitrogen Response Plan submitted by DDEC and the WLWB agreed with many of those issues raised by directing the company to resubmit a revised Plan on or before June 28, 2014.

#### **NEW ITEMS**

### Seepage Report

Comments on the 2013 Seepage Report are due on June 13, 2014. There is not much to comment on, as the Report is similar to the last several years.

Laura was concerned that the WLWB directive on the 2012 Seepage Report was issued so late that the company would not have had an opportunity to address those issues in its 2013 Seepage Report. It was agreed that the Agency would note this concern in an e-mail to the WLWB and that further comments might be made when the company submits its report on thermal monitoring of the waste rock piles by September 30, 2014.

Action Item #4: The Executive Director is to send an e-mail to the WLWB stating that the Agency will not submit any comments on the 2013 Seepage Report but will review the thermal monitoring assessment and the 2014 Seepage Report.

It was noted that on the recent site tour, thermosyphons were in use. DDEC could consider thermosyphons as one method to ensure that all the waste rock piles freeze permanently. Some Directors expressed an interest in seeing the thermosyphons on the next site visit.

### 2013 Aquatic Effects Monitoring Program Report

Comments are due on the 2013 AEMP Report by June 12, 2014. Tim had prepared some preliminary comments. These included the observation that potassium is now above the Site Specific Water Quality Objective downstream of the Mine. Tim would also like to see the company incorporate more Traditional Knowledge (TK) into its monitoring. For example, Diavik uses TK to address differentials in fish health and the conditions in different parts of Lac de Gras. Diavik also uses different criteria for DELT,

such as gill colour and scales. It was agreed that Tim would raise the use of TK in aquatic effects monitoring with Lutsel K'e during his upcoming community visit.

Action Item #5: The Executive Director is to work with Tim and Laura in submitting comments on the 2013 AEMP Report.

Action Item #6: Tim will raise the issue of the use of TK in the Ekati Aquatic Effects Monitoring Program with Lutsel K'e during his upcoming community visit.

# **Misery Power Line Land Use Permit Application**

Comments on the Misery power line land use permit application are due June 20, 2014. According to GNWT, the power line is not one of the approved activities as per the land lease issued in 1997, therefore the company needed to apply for a land use permit (LUP). The intent is to install a 150 kv power line from the Main Camp to Misery Camp. A similar line might be constructed out to the Jay Project if and when it is approved.

Some potential issues include:

- There are proven issues with transmission lines as semi-permeable barriers to caribou movements and creating a Zone of Influence. Kim has not seen any information on the impacts of smaller power lines versus larger, high-voltage transmission line.
- During the site tour, the company downplayed any potential effects on caribou and birds, and could not provide detailed information on the configuration of the lines and poles.
- The visual effects (including ultraviolet light) and noise (both from transmission and the wind) could increase the semi-permeable barrier effects of the Misery Road. There was some discussion about mitigation including whether it might be better to have power lines on the ground, at least at known caribou crossings, rather than using poles for the entire length. It may be possible to better "camouflage" the poles and power lines by using paint or other materials.
- It is not clear what if any monitoring the company intends to undertake other than a vague commitment to expand the Wildlife Effects Monitoring Program.

- The final design of the power lines is not in the LUP application, so the Agency does not know what the poles and pads will look like, or what the alternatives may be.
- The Agency has heard that the Yellowknives Dene First Nation has concerns about the power line in terms of its potential barrier impacts to caribou movements.

Action Item #7: Kevin will work with Kim to put together a comment table to submit to the WLWB.

### **Pigeon and Big Reynolds Ponds Dewatering Plans**

Comments on these dewatering plans are due by June 20, 2014. It was agreed that the Agency does not need to submit any comments but there was interest in receiving the fish-out report on Pigeon Pond.

Action Item #8: Tim will request a copy of the Pigeon Pond fish-out report and provide any observations and recommendations to the Agency.

### 2013 Revegetation Report

The Agency received this report within the last month. No comments have been requested but it is available for review.

# LLCF Reclamation Pilot Study

The pilot study is available for review. Directors were encouraged to review it to determine whether any comments should be submitted to the company and/or regulators.

### 2014 Wildlife Research Permit Application

The Wildlife Research Permit Application is submitted annually for the Ekati Wildlife Effects Monitoring Program (WEMP). This year's permit application is similar to the previous one and no changes to the Program were noted. It may be possible for the company to request a multi-year approval with the changes that were recently made to the *Wildlife Act*. The Agency will focus on the camera report and the grizzly bear DNA report that are supposed to be release later in the summer.

It was noted that in 2012, Diavik conducted the aerial caribou surveys for both mines while BHPB conducted the grizzly bear DNA study. The caribou survey data were not reported in the Ekati WEMP reports.

#### **OTHER BUSINESS**

#### **Future Meetings**

The next Board Meeting will be held September 22-24, 2014. There was some interest in visiting Lutsel K'e but Tim will check those dates with the community during his upcoming visit.

Action Item #9: Tim will check with Lutsel K'e about hosting an Agency Board meeting and open house for September 22-24, 2014.

Dates for the 2014 Annual General Meeting, a Board meeting and possible Environmental Workshop were set for December 2-4, 2014. Potential topics for an Environmental Workshop will be discussed further at the September 2014 Board meeting with dust suppression as one possibility.

Meeting adjourned at 1:00 p.m. on June 13, 2014.

Carla Dolamal \_\_\_\_

Summary of Discussion Approved by Jaida Ohokannoak, Secretary Treasurer.