

**Independent Environmental Monitoring Agency
95th Meeting of the Board of Directors
Yellowknife, NT
September 12, 2016
Summary of Discussion**

Directors

Jaida Ohokannoak
Emery Paquin
Kim Poole
Tim Byers
Arnold Enge
Jesse Jasper

Staff

Marc Casas, Executive Director
Jessica Simpson, Communications and
Environmental Specialist

Meeting commenced at 9:00 am

AGENCY BUSINESS

Information Updates

Jaida: Worked on reviews such as the Environmental Impact Review, Air Regulations Workshop, the summary comments on Jay Project water licence application, and reviewed some Agency letters.

Kim: Participated in Environmental Impact Review, including the technical sessions. The Wildlife Effect Monitoring Plan (WEMP) and the Conceptual Wildlife Effects Monitoring Plan (CRMP) workshop is September 14, 2016. Kim also reviewed various letters and financial reports.

Arnold: Reviewed the Environmental Impact Review and submitted comments in July. In August, Arnold worked on the Waste Rock and Ore Storage Management Plan (WROMP), and he also did some general correspondence. Arnold announced that he has stepped down as chair of Environmental Monitoring Advisory Board (EMAB), but he is still a director. Arnold is also a Director at Snap Lake Environmental Monitoring Agency (SLEMA); the Snap Lake Mine is under care and maintenance.

Marc asked if SLEMA still meets regularly. Arnold said that SLEMA continues to meet 3 times a year, and their last annual general meeting was in Lutsel K'e a few weeks ago. Arnold also mentioned that DeBeers Canada has stated that if/when Snap Lake Mine is sold, the Environmental Agreement will be part of the package.

The new chairperson for EMAB is Napoleon Mackenzie, the vice-chairperson is Charlie Catholique, and the secretary-treasurer is Julian Kanigan.

Tim: He was on the conference call for the Environmental Impact Review technical sessions in July. He also reviewed the work for the Two Rock Lake drawdown. Tim is currently reviewing the AEMP Re-evaluation with Marc. Together they looked over the contractor's report reviewing biota monitoring in the AEMP and had a call with him a few days ago to clarify two points. Overall, the report is pretty good, and is pleased that Marc was able to contract Mike Paterson.

Jesse: Attended the EIR Technical Session, looked at the AEMP, and went back to the original Jay Project DAR and EIR, was especially impressed with the dike design, he thinks it is pretty thorough. Some reviewers might suggest some differences in modeling approaches or methods used, but engineering aspects of project components seemed quite impressive. Also looked at Two Rock Lake and the Patterson AEMP report.

Emery: Took a look at the 2016 EIR and provided comments on the Jay AEMMP, the Jay water licence application and the GNWT Air Quality Regulatory Framework.

Marc: Has been involved in all the reviews and meetings, air quality, air regulations, WEMP, and EIR Technical Sessions. He was happy with the Paterson AEMP report, which was sent to Directors and Society Members on September 9.

Jessica: Jessica reported that the annual reports are finished, but they are not in our office yet. She was under the impression that they were to be here on September 2. Jaida thinks that the annual reports need to be here now. Marc is interested in getting some new quotes for next year. Delays in delivery have been going on too long.

Marc: Wants to get the Agency Director's opinion on how to approach how the DDEC workshops were scheduled and planned. The Directors that discussed who would have jurisdiction over ensuring this issue is sorted in the future. Kim thinks Marc should bring this up at the workshop WEMP/CRMP workshop, and Emery suggested it also be discussed at the Environmental Agreement Implementation Meeting.

Action Item #1: Marc will bring up how the workshops were organized at the upcoming workshops and the next EA Implementation Meeting.

Financial Items

Directors reviewed the variance report, which also shows the expenditures to date. The bulk of the separate fund will be used up by the Jay water licence and land use permit processes. All items seem to be tracking on budget or below except for Board Meetings. It was noted that the Board meetings had used up more of the budget considering that

only 2 board meetings were accounted for. Marc pointed out that this may be because the site visit was allocated to the second board meeting, which had a large impact on budget. Once the site visit numbers were removed it seemed to be tracking appropriately.

Marc thought that maybe since the Agency is already at the Water License technical sessions in Behchoko, maybe we can host something on the side for community members. Directors think that the technical sessions will be pretty full and busy.

Directors had an in-camera session to discuss a staff matter.

NEW BUSINESS

Items that are currently under review

- **Jay Project Water Licence:** The technical session is October 4-6 in Behchoko. Directors discussed who will attend on behalf of the Agency based on the subjects that will be discussed. Attending will be Tim, Jesse, Jaida, Emery and Marc. The Agency would also like to see an agenda as soon as possible.
- **WEMP/CRMP Workshop:** This workshop is Tuesday September 13. Attending are Marc and Kim.
- **AQEMMP:** Wednesday September 14. Jaida, Emery and Marc will attend.

Air Regulatory Framework and EPA Changes

Marc attended the workshop and Jaida attended by conference call. Agency drafted a letter and it was discussed. Overall, the Agency thinks there is a lack of openness and transparency in the proposed permitting process. The Agency is not sure if there is another opportunity to comment – Jaida is under the impression that this is the only opportunity for public comments.

Emery explained what the Air Quality Regulatory Framework would look like and the Directors discussed the Agency's recommendations. All that we know so far are some possible regulations, no actual regulations or pollutant threshold numbers. Emery confirmed that all Bills are released for public comment after Second Reading in the Legislative Assembly, so there will be another opportunity to review the legislative amendments.

Directors discussed if their participation in this process is overstepping the Agency's mandate. The Agency thought it was a good idea to be "on the record" than to not participate.

Directors will look at the Agency's comments as soon as possible, as they are due September 16, 2016.

AEMP Re-Evaluation

Before the review began in a letter to the WLWB from the agency asked that a technical session be part of the workplan. The WLWB replied that they normally don't do that and that they would rather wait to see how many comments were received. Now that the comments have been received it is clear that there are lots of concerns. In the Agency's comment submission, we requested that a technical session be held to discuss issues and allow for community members to also hear discussion and ask their own questions. Directors think that Mike Patterson should be at these follow-up sessions because he would be more precise in answering the questions than Marc or Tim. Emery thinks that if these comments are in the Agency letter, then we need him to speak on our behalf when we are challenged. Also, it is not as effective having someone on the phone than in the room – e.g. one-on-one discussions during break times — so we should have Patterson attend the workshop. The Agency considers the AEMP re-evaluation to be a critical document.

Directors discussed the report written for the Agency by aquatic ecologist Mike Patterson of International Institute for Sustainable Development (IISD) - Experimental Lakes Area. Overall, Directors were very impressed with the report. Jesse would like see DDEC's recommendations attached to the report before it is sent to Society Members and posted to WLWB's ORS so that readers don't have to look for it.

Marc has already sent the report to the Agency's Society Members, but he could put the report on the ORS and add the DDEC recommendations to that.

Action Item #2: Marc will gauge Mike Paterson's availability to attend any follow up sessions (should there be any).

Action Item #3: Marc will also ensure that the Agency Society Members receive the report and DDEC's recommendations.

FOLLOW-UP ITEMS

EIR Workshop

The EIR public workshop is September 21 and 22. Marc and Jaida will attend with an interest in listening to the community concerns. DDEC made a note that each group send

only 2 participants so that the workshop is not overwhelmed with technical jargon. DDEC held the technical workshop in the summer.

COMMUNICATIONS UPDATE

Jessica discussed what she has been working on since the last board meeting. The annual reports are late. Jaida emphasized that these need to be done earlier as a condition of the audit.

Jessica has also made some updates to the website, but the website requires more work. The Agency is interested in promoting the Timeline once it is adequately updated.

Jessica has also contacted a few videographers who might be interested in stringing together a video for the Agency – only 1 has written back. Jessica made a bit of a “script” to show the content and will send it to Directors for review.

Directors discussed the benefits in attending the Geoscience Forum and have decided to look into other options. Arnold thinks that Canadian Aboriginal Mining Association would be a good alternative conference for the Agency to attend.

Action Item #4: Jessica will look into how many people use the Timeline website.

Action Item #5-: Jessica will send the draft video script to Directors for review.

UPDATES

Fisheries and Oceans Canada (DFO) – Angie McLellan, Veronique D’Amours-Gauthier, Mark D’Aguiar

Also attending was Allison Rodvang from EMAB.

Marc initiated this meeting based on some questions that the Agency had on DFO participation in reviews. The Agency is mandated to review the performance of all regulators and report that in the Agency’s annual report. Because of the changes to DFO’s mandate, the Agency is uncertain what DFO currently is mandated to do. It is unclear why DFO has participated in some reviews, and not in others.

- Mark (DFO) mentioned that things are changing within the department. The department recently received \$44 million to be used for science. This means they can hire more staff and do more on the land monitoring and training.
- The Fisheries Act review was discussed. The review will likely finish in February, and it could be another 2 years before they get new direction or make legislative changes. The review is public and there is a website (a link on the DFO website) that people can go to make comments. Mark (DFO) said that some things are still monitored under the old Act e.g., No Net Loss.
- Marc (the Agency) inquired about how DFO triages projects. Veronique said that it depends. A project has to fall within the departments' mandate, which has been narrowed and shared with Environment and Climate Change Canada (ECCC). If a project has concerns with water quality or sedimentation then it falls under the mandate of ECCC. DFO is more concerned with water quantity, fish and fish habitat.
- A lot of times DFO will review something, but the public does not know about it because DFO simply had no comments. Veronique also mentioned that the WLWB has asked them to submit something, even if it is to say that they have no comments. This matter still needs to be brought to DFO management. Veronique said that they are more involved in the projects than what is made public because they do a lot of work that is outside of the actual process. For instance, they will sit down with the proponent before applications are submitted to the WLWB
- The Agency inquired how the DFO mandate fits into the AEMP. Mark (DFO) clarified that DFO has specific hydrologic quality factors that DFO looks into, such as the diversion channels, and they look at the flows in the narrows. Because DFO is concerned with fish, they look at water quantity, which could affect fish passage, or footprint within the water, and the monitoring of authorizations.
- Marc (the Agency) thought that fish sampling and fish health would fall under DFO's mandate. Veronique said that fish health, as relates to human fish consumption, is covered by Health Canada.
- Kim asked what the Agency should do if we have a fish issue and do not know what to do. Veronique said that Kevin (past Agency Director) would contact both DFO and ECCC and ask if they had comments on specific reviews.
- Mark (DFO) commented that a lot of DFO problems are related to personnel. If some of DFO's comments do not seem as thorough, it is because DFO lacks manpower. Often DFO has to prioritize their work load or there is just no time to comment.
- DFO agreed to come back again in the new year with a bit more notice and would be able to give an official DFO presentation regarding their mandate.

Agency Debrief:

Marc commented that maybe the DFO mandate is not appropriate. The AEMP seems like a key document that Department of Fisheries should, by any definition, be involved in.

Tim also said that it seems that there is some gray area in federal department mandate, some issues seem like it should be DFO, but it's ECCC. For example, who would cover fish food (zooplankton)?

Kim asked if the Agency is aware of who the ECCC contacts are for fish. Marc and Tim know of 2 ECCC contacts who deal with fish, but have never seen a comment on fish from ECCC. They have only ever seen comments from ECCC that address water quality.

Allison (EMAB) said that EMAB has also observed how DFO has not commented on many reports/reviews over the years. EMAB is also thinking of getting DFO in for a talk/presentation.

Other Business

Security Discussion with John M and Allison (EMAB) – John McCullum and Allison Rodvang

Marc asked John and Allison (EMAB) here to discuss security at Diavik Diamond Mine because right now the mine is going through final closure issues that have never been discussed before in regards to the North Country Rock Pile (NCRP). Marc reckons this is an issue that the Agency should be keeping tabs on because it could set a precedent, particularly with the approval of closure criteria, which to date have not been set in the NWT.

John said that they received the final closure plan for the NCRP as an appendix to Diavik Diamond Mines annual report. The NCRP is the main waste rock pile and it contains some potential acid generating (PAG) rock. The A21 Dike now needs to go into the closure planning and the security requirements need to be updated.

EMAB approached the closure plan for the NCRP by taking a detailed look at the closure criteria. Earlier this year, Diavik Diamond Mine submitted specific closure criteria to the WLWB. The last time closure criteria were discussed was in 2010.

The mine set site-specific objects for the NCRP, but it seems that Diavik Diamond Mines “pick-and-chooses” what criteria to use. Diavik often proposed Metal Mining Effluent Regulations (MMER) rather than Canadian Council of Ministers of the Environment (CCME).

Overall EMAB’s consultants had comments on things that need to change overall at the mine. Bill Slater said a number of the criteria were not effective. Arctis Canada looked at

Diavik's closure plan and how it has evolved over the years. It is no longer a "walk away" plan as it was originally. Because there is now a pond in the Processed Kimberlite Containment facility, it is now a water containing structure that cannot be walked away from. The Canadian Dam Safety Guidelines indicate that you should not walk away from a dam and the NCRP was not designed to hold water, it was designed to shed water.

EMAB also looked at Diavik's community engagement on closure, which has not been very good. There has been very little discussion on closure and none of it has been documented.

The WLWB letter to GNWT was discussed. It asked the GNWT to respond to provide clarity regarding their concerns with the use of site specific risk based analysis for determining closure criteria. They also were requested to comment on the relinquishment of securities.

Tim asked about the AEMP, he is concerned that the cumulative effects will become important as Jay Project comes on line. He talked about changes to the phosphorous triggers because of the phosphorous levels in the far field sites may be increasing. He wondered how they can be still considered reference sites in 2007-2010. John said that the data from 2007-2010 are still baseline data and WLWB agreed to this. John also said that phosphorous is going down and chlorophyll is going up, but no one is clear as to why that is happening. Consequently, AEMP stations are being added to the Narrows between Lac de Gras and Lac du Sauvage.

John is curious to know what the Agency thinks of the Ekati Interim Closure and Reclamation Plan (ICRP), and in particular the discussion on closure criteria. Marc asked if EMAB has any experience with Diavik seeking relinquishment of posted security. John McCullum indicated that they do not. This initiated a discussion on the relinquishment of security covering how it is calculated, if monitoring costs are included/excluded, and when relinquishment can happen, if ever.

It was also agreed between the Agency Directors and EMAB that a joint discussion between all monitoring agencies regarding the relinquishment of securities and closure in general would be helpful.

The Agency asked what the result was of the water licence amendment to raise Total Suspended Solids (TSS) levels. John said that Diavik retracted the application.

John also mentioned that extra-fine processed kimberlite (EFPK) will be pumped underground and fill the pit. Essentially Diavik looked at Ekati's Beartooth Pit. The EFPK there settled and there is no mixing.

IEMA Word List and Style Guide

Jaida commented that the style of the Agency's letters has changed, and she wondered if everyone was happy with that kind of style. Everyone agreed that although the letters are lengthier, they clearly spell out the background and recommendations, and the reason for it is stated more clearly.

Jaida also remembered that in the past, the Agency was given direction to draw out the recommendation more. Kim also likes the subheadings on complex subjects.

Canadian Eco-Toxicity Workshop 2016

Marc will be presenting at the CEW 2016 September 27th. The presentation is coming along, but is not yet complete. The presentation will follow closely the abstract everyone has looked at and reviewed. Once the presentation is complete, he will send it around to the directors for feedback.

Structuring Comments and Recommendations

Marc reviewed his course on organized reasoning. He gave an overview of the general rules for developing paragraphs and arguments. Please see the overview document.

It was also mentioned how before reviewers would give a bit of a background in their email summarizing the document that was reviewed. The backgrounder should briefly address the following questions:

- What did the document say?
- Why did it say this?
- Why is this an issue?
- What is our comment/recommendations?
- Why are we making this comment/recommendation?

Future Meetings

December 6, 7, and 8 the Agency will host the annual general meeting, board meeting and Christmas Open House (usually with SLEMA and EMAB).

The week of December 13-15 is the Jay Water Licence Public Hearing.

Kim Poole requested that the annual report writing session be the week of May 8-12. This will be discussed again at the December Board Meeting.

The Agency is considering having a board meeting in February instead of March.

Meeting adjourned at 5:20 pm on September 12, 2016.



**Summary of Discussion Approved by
Kim Poole, Secretary Treasurer**
