

Minutes – December 5-6, 2023 Yellowknife Boardroom and by teleconference / Zoom

Present:

Charlie Catholique, *Chair* Marc Whitford, *Director* Sean Erasmus, *Director* Kelly Fischer, *Director*

William Aglukkaq, *Alternate* (by phone - Day 2 only) Gord Macdonald, *Director* (by phone)

Absent:

Violet Camsell-Blondin, Secretary-Treasurer

Staff:

John McCullum, Executive Director

(minutes)

Allison McCabe, Environmental Specialist

Guests:

Mark Nelson, Diavik (Day 1 – by phone) Rainie Sharpe, WSP (Day 1 – by phone) Megan Cooley, NSC (Day 1 – by phone) Kyla Gray, Diavik (Day 1 – by phone) Marc Casas, IEMA (Day 2 – in person) Joe Heron, Inspector (Day 2 – in person) Łutselk'e Dene First Nation North Slave Métis Alliance Yellowknives Dene First Nation

GNWT

Kitikmeot Inuit Association Diavik Diamond Mines

Tłįchǫ Government

Environmental Monitoring Advisory Board

Environmental Monitoring Advisory Board

Tuesday, December 5 2023 Meeting started at 9:00 am at EMAB Boardroom and by teleconference

Chair opens meeting.

Notes Christmas Closing from Dec 18-29'23 (inclusive)

Item 1: Approval of Agenda

Chair reviews agenda.

Noted need to elect a new Vice-Chair

Motion: to approve agenda for December 5-6

Moved: Marc Whitford Seconded: Kelly Fischer

Motion carried

Item 2: Conflict of Interest



No conflicts declared

Item 3: Minutes of Previous Meeting

Board reviewed minutes of previous meeting.

Motion: to approve Oct 10-12, 2023 meeting minutes as presented

Moved: Kelly Fischer Seconded: Marc Whitford

Motion carried.

Email motions read into minutes

Review of Action Items

- EMAB to write check to Jack Kaniak's estate for his outstanding honorarium; awaiting details from Kaniak family
- EMAB to request Diavik provide details on scholarship in honor of Jack
- Charlie asked if EMAB has policy for compensating outgoing board members; ED says it's on a case-by-case basis, e.g. a plaque, dinner

Outstanding recommendations

• ED to follow up with both outstanding recommendations

Item 4: Finance

ED presents item

Variance Report – to Nov '23 – noted that EMAB is on target for budget this year except for the PKC Closure Design review by Jean-Marie (funds to be rolled over from last year to pay for this)

Revised budget – Dec '23

Motion: To revise the 2023-24 budget as proposed

Moved: Marc Whitford Seconded: Kelly Fischer

Motion passed

Roll over request from 2022-23

- ED noted that there is \$45,000 in the budget right now for FCRP; asked Board if they also wanted to request to roll over unspent FCRP review funds—this is allowed in Business Rules,. EMAB can request rolling over the unspent Community Involvement funds, but this would not fit the Business Rules. ED asks Board if they want to send letter to request these extra funds.
- Good to request funds are rolled over, in case it's needed
- Requesting unspent funds from community updates doesn't fit business rules



- If business rules are strict, could be a waste of time to request these funds be rolled over
- Is Board proposing that EMAB remove request for unspent community update fund rollover request and apply instead for 'additional funds for unanticipated/unforeseen work' (wording from the EA) instead?

MOTION: To send the letter requesting rollover of funds as written

Moved: Marc Whitford Seconded: Kelly Fischer Against: Gord Macdonald

Motion passed

Request for additional funds for 2023-2024 costs for review of Diavik Natural Drainages Water Licence Amendment

 DDMI received letter dated Nov 24, 2023. DDMI is awaiting all financial request letters to arrive to deal with all at once.

Workplan for 2024-25

ED presents workplan

Motion: to approve workplan for 2024-25 as presented

Moved: Marc Whitford Seconded: Kelly Fischer

Motion carried

Jack Kaniak donation - addressed in Item 3

ED Performance Evaluation

New Personnel Committee member should be appointed to replace Jack Kaniak

Motion: to appoint Sean Erasmus to Personnel Committee

Moved: Marc Whitford Seconded: Kelly Fischer

Motion carried

ES Exit Interview Results

- ED presents summary of ES exit interview responses, noted that salary questions could be added to standard exit interview questions
- Board to discuss salary range increase for ES position
- It would be helpful for Board to see full exit interview results
- More appropriate for Personnel Committee to review, then present summary and recommendation to Board on how to proceed
 - o Committee should also review exit interview questionnaire

AGM Support Budget Line

• Does Board want to revise next year's AGM Support budget to include honoraria as well as travel for one delegate from each party (from outside of Yellowknife)?



• ED to add line item to next years budget and board can approve then

Action item: ED to provide ES exit interview responses to Personnel Committee

Action Item: ED to add honorarium to AGM Support line item to 2024-25 budget and board can consider then.

BREAK

Item 5: Update on TK Working Group

Board Member Updates

- Both Gord and Sean attended last TK WG meeting Oct 23-24
- TK WG currently searching for ED, job has been posted on Facebook
- Has been a struggle to get members to meet in-person; but October meeting was a productive in-person meeting
- Covered what the scope of TK Monitoring program will look like and had presentation from BOTG
- No discussion yet on whether EMAB can be granted observer status
- Other attendees to the meeting included Violet, Brett Wheler, Katrina Hatogina, Tas-Tsi Catholique, Sean Sinclair and Orna Phelan

Next Steps – request from TK WG (Letter dated Sept 15) ED presented item from kit

- EMAB doesn't have a sense if what's going on with TK WG; will follow up with TK WG requesting meeting notes and observer status
- Q: Seems most of TK WG's work has been administrative in past year wondering what is the progress of the actual monitoring plan, or if there's any workplan/timeline on the development of the plan
- A: TK WG actively developing plan parallel to getting the organization sorted. TK WG assists Diavik. At the end of the day, it's DDMI's responsibility to provide TK plan to WLWB it's not up to communities to develop the plan.
- Q: If TK group becomes part of EMAB, would this affect/lessen DDMI's responsibility for TK Closure Monitoring? A: No, DDMI is just looking for assistance with the plan.
- Q: EA says TK Panel will act on instructions of EMAB. If TK WG becomes part of EMAB, will it act on EMAB instructions?
- A: TK Panel is intended to be independent. Panel would keep Board informed of its work. Board would provide governance.
- Q: Would TK Coordinator be an EMAB staff?
- A: Yes. Coordinator would both develop TK Closure Monitoring Plan, and implement it.
- Q: Proposal says TK Panel will take up ½ of ED's time will this be all the time, or only during certain project phases? EMAB ED not able to spend ½ time on TK.
- A: Expectation is that more than $\frac{1}{2}$ of ED's time would be dedicated to TK, mostly on administration. TK would become a big focus.
- Proposed structure differs from existing structure. Note that Science Panel is not needed for TK Panel to function. Science Panel was proposed to keep EMAB independent.



Q: Proposal to share office space – is this expected to be in the current EMAB office?

A: Yes

Q: Were any additional costs to EMAB identified

A: No additional costs came up, but there may be additional costs.

Discussion

- Doesn't seem to be any benefit to EMAB in doing this, and seems like a lot of extra work and responsibility
- EMAB's mandate is to help the parties, and this would help parties. EA may need to be updated to accommodate change.
- Two major issues ED providing extra time, and significant change to how EMAB operates (science panel)
- Science panel is just another name for regular EMAB consultants ('ad hoc' panel). TK WG not intending to add a structure
- TK should have been done from day 1, not this close to closure. How soon can the Plan be in place?
- If it's the Board's wishes to facilitate TK, then should look at ideal EMAB structure to do this rather than trying to fit in TK with EMAB
- If the TK WG doesn't end up under EMAB it would need its own group.
- EMAB needs to be independent and have the ability to review the TK plan; at the end of the day, the TK plan needs to be implemented; but a year has gone by and seems like most work completed so far has been administrative
- TK Group wouldn't agree with that characterization; doesn't need EMAB comments on the Plan
- EMAB will be making comments to WLWB on TK Plan through review process
- Logistics are making this very challenging

Q: Will EA exist post-closure?

A: Yes, EA will go to end of mine closure

Discussion:

• EMAB could facilitate TK group without making it part of EMAB's structure. TK WG provides plan to Diavik while working alongside EMAB. Staff person would be something between an ED and a Coordinator

Q: Does TK WG not want EMAB to see the minutes?

A: EMAB needs access to minutes, right now TK panel seems secretive, and we need to get away from that mentality and be transparent

- DDMI will take these comments to working group
- Board should consider response to TK WG's letter
- TK WG should work independently. It would be a burden on EMAB.
- TK WG chair rotates, EMAB needs to ask if they can sit in. Gord will pass on EMAB letter to group.
- KIA is the chair for the next TK WG meeting (Dec 14) but agenda may be too full to address
- Send ED to next TK WG meeting to ask questions about working with EMAB
- Can EMAB generate a letter fast enough to have it in for Dec 14, so TK group members can review it ahead of time, and then discuss at next meeting in January (where EMAB will attend if agreed)

ACTION Item: EMAB staff will draft letter to TK WG and circulate draft by Thursday, Dec 7



Item 6: 2022 AEMP Report Review

Mark Nelson and Kyla Gray join from Diavik; Megan Cooley from NSC, Rainie Sharp from WSP.

ED introduces item

Comments are due to WLWB today, so Board will need to make a decision on the recommendations.

Diavik Presentation by Rainie Sharpe on 2022 AEMP Report (WSP) - presentation in meeting kit

• Generally there is evidence of nutrient enrichment in Lac de Gras, but no evidence of toxicological impairment.

Discussion

Q: If people were to eat a fish with metals (e.g., chromium, tin) could you remove those metals from your body with a heavy metal cleanse?

A: Not a fair question to ask an aquatic biologist about human health

Consultant notes concentrations of metals of these fish are not concerning, if you ate a big fish every day that might be a concern.

Mark noted that the HHERA study has not identified any human health risks with eating fish

- in future, it would be helpful for presentations to be less technical and more plain language for Board
- Noted: Tried to strike a balance between plain language and technical

EMAB Presentation by Megan Cooley Reviewing DDMI's 2022 AEMP Report (NSC)

Noted Diavik should revise or explain the differences in the fish health data analysis from previous years.

Q: Explain what is meant by looking at 20-30 fish per year for parasites

A: ED had asked NSC for recommendations on monitoring parasite load at the TK Fish Camp. Recommendation was to investigate parasite loads (systematically counting parasites in 20-30 fish) in future camps, to quantify the numbers of parasites found

Rainie addressed some of of NSC's comments

- Slimy Sculpin stomach contents was correct; clarified that stomach content information was only to characterize what the sculpin had been eating recently; not meant to be a population study on diversity and abundance of benthic invertebrates. Just a "snapshot", stomach contents of fish also associated to mouth size of sculpin
- Megan responded clarifying she had noticed stomach contents might be related to locations where sculpin
 are sampled compared to where benthics are sampled.
- Megan noted discrepancy between Fish Health and Weight of Evidence chapters

Q: Any sand or metals found in the fish stomachs?

A: DDMI doesn't analyze chemistry of fish stomach contents

ED presents comment table for Board including NSC comments and 3 additional comments (from EMAB) on 2021 TK Fish Camp.



Motion: to approve comments on DDMI's 2022 AEMP to submit to WLWB

Moved: Marc Whitford Seconded: Kelly Fischer Abstained: Gord MacDonald

Motion carried

BREAK

Item 7: Discussion to finalize workshop report on future role of EMAB

ED presents item from kit

Follow-up to item at last (Oct 2023) meeting. For final version of report DDMI rep doesn't agree with highlighted part of sentence and would like it removed.

Discussion

- Entire sentence should stay
- Highlighted part of sentence was added post-workshop, and was not agreed to during workshop.
- EA has essentially the same standard wording in section 18.2
- This specific wording was not discussed at workshop
- Up to board to decide whether to keep or change sentence
- Proposed change to sentence: delete highlighted section
- 3-4 board members noted they wanted specific highlighted wording, the report needs to be accurate to reflect that
- Doesn't remember the highlighted part being discussed, but thinks it should stay in
- Another alternative is to replace highlighted section with 'throughout Diavik's active closure and monitoring'
- The consensus is that EMAB should exist through all stages of monitoring until Minister dissolves it
- DDMI concerned about keeping highlighted sentence, because it is too open-ended; there is no standard regulatory process for closing a water license and getting a security returned
- It was agreed to at workshop that some form of EMAB should exist until agreement concludes
- Don't want to put DDMI in a bad position with this wording
- This report is only submitted to EA working group for consideration. EA WG will consider. Final decision will be made by Minister.
- Have to be fair and impartial as EMAB's words could still have force and effect
- By changing recommendation, it makes EMAB's recommendation weaker
- Could also change "supported by all Board members" to "most" Board members

Q: Is it acceptable to say, "this is a recommendation from the workshop"

A: No, would prefer it written as "supported by the majority" of Board members

- Q: What if we say, "continue to exist throughout Diavik's closure" to align with exact wording in EA
- Why are we trying to add in things that didn't happen in the workshop?
 - this came out of the workshop during the comment period, and Gord commented to remove it, but facilitator opted to not remove it, so ED will talk to Shauna and clarify

Action Item: ED to follow up with Shauna Morgan on workshop discussion on this topic, and rationale for current wording.



Item 8. Update on A418 Filling

Diavik rep presents item

- continuing to fill A418 with PK
- Levels are coming up

Q: Any Selenium in the water?

A: Yes. Selenium is in all the rock at Diavik

- Q. Why is SNP 1645-88 not included in SNP report if PK is being deposited to pit?
- A. Diavik rep believes that quarterly measurements of solids are required. He will follow up.
- Next re-run of model will be before the flooding of the pit, which is expected by middle of 2026.

*on day 2, Gord reported back on this question: decant water doesn't get sampled it reaches the bottom of the pit.

Item 11. Annual Report Update

ED presents item from kit

- Virtually no progress since last meeting update, staff have been busy with time-sensitive reviews and meeting preparation
- ED proposed tentative schedule and status of all items hoping to have 1st draft for Board review by early January.

Item 12. Water Licence Proceeding Update

ED presented item from kit

• Record is now closed and decision is in the hands of WLWB

Item 15. Board Member Updates and Community Concerns

- Marc Whitford, NSMA Evacuation was expensive for community members and organisation, money from Diavik was helpful.
 - Busy setting up the winter guardianship program, monitoring the land, keeping up with government meetings.
 - o looking into health initiatives for community members.
- Sean Erasmus, YKDFN Chief Eddie Sangris has passed away.
 - o Half of their team members just went for training.
 - Suggested use of magnets to remove heavy metals
- Kelly Fischer, GNWT No updates



- Charlie Catholique, LKDFN just had an election, James Marlowe is Chief, 3 new councilors some previous councilors also re-elected.
 - Having a meeting re: old uranium mine (Regina/Stark Lake).
 - Climate change affecting community ice hasn't frozen so can't get out of Lutselk"e without plane
- Gord, Diavik No updates

Item 9. EAQMP Collaboration

ED presents item and recommended options

Q: Is dispersion monitoring, yellow haze, or closure objectives mentioned in GNWT guideline? If DDMI just adheres to guidelines, is it possible EMAB will miss something?

A: EMAB recommending DDMI follow the GNWT guidelines and additional EMAB recommendations.

Noted that De Beers is replacing all its TSP monitors.

Motion: to go with option 1, to recommend Diavik revise EAQMP to meet GNWT Guideline and additional

EMAB recommendations
Moved: Kelly Fischer
Seconded: Mark Whitford
Abstained: Gord MacDonald

Motion carried

Wednesday, December 6 2023 Meeting started at 9:00 am at EMAB Boardroom and by teleconference

Chair opens meeting at 9:00 am (EMAB Boardroom and by teleconference)

Chair reviews the agenda.

Item 10. WMMP Update

ES presents item from kit.

ZOI Analysis

- TG submitted their comments on ZOI analysis recently; GNWT has directed Diavik to respond to all comments by Dec 31, 2023, and to update the ZOI Analysis Plan accordingly and submit to ECC.
- Diavik will submit a ZOI Analysis as an addendum to the 2022 WMMP report

Dec 4 Meeting on Caribou Behaviour

- Discussed several options at Monday meeting but ultimately didn't come to a resolution
- Regardless of ability to collect far-field behaviour data, it's still useful to collect near-field data for comparison throughout closure (e.g., with less mine activity, will caribou start coming closer to site?)



- ECC asked EMAB for letter illustrating why near-field data still useful to collect during closure
 - EMAB to provide response letter to GNWT regarding rationale for behavior monitoring by Jan 12th

Q: What does Ekati do for caribou behaviour monitoring? Are there lessons/standardized methodology we could learn from and use?

- A: Not discussed very much at meeting
- Q: Do Ekati and Diavik work together?
- A: They used to collaborate on GNWT-led aerial surveys, but haven't since 2012
- Misery and Diavik 25km away from each other
- A: The mines have worked in the past to standardize their AEMP data for cumulative effects studies

Suggest EMAB send letter to GNWT on cooperation between Diavik and Ekati on caribou behaviour monitoring.

Item 14. Motions to approve EMAB recommendations

ED presents item from kit

Discussion

• To address situation where Diavik rep revised wording of a motion, then moved it, so two similar motions on the table.

Q: how would a regulator respond to consultants' comments rather than EMAB A: not clear

- EMAB has always approved consultant recommendations as EMAB recommendations
- From procedural perspective, a motion needs to be moved and seconded before it gets voted on, so by DDMI rep revising wording it creates 2 competing motions
- Procedurally, what happened in past instances was correct; no one seconded revised motion so motion died
- The fundamental question is should we submit consultant recommendations as EMAB recommendations
- At the regulatory/receiving end, how are these recommendations considered? As consultants or EMAB's? E.g., would they consider a consultant report from EMAB as from EMAB anyway?
- Ultimately EMAB is responsible for comments we engage the consultant, provide instruction, and review/question consultant comments. The consultant provides advice to EMAB, and EMAB reviews and provides those comments as EMAB comments.
- Diavik does the same thing
- Don't think EMAB should be signing off on very technical comments as EMAB comments

Most Board members agreed to continue approving consultants' comments in the same way as has been done in the past.



Unscheduled Item - Update from IEMA (Marc Casas)

- Ownership of Ekati has changed a few times since 2016, current owner is Burgundy, diamond finishing company from Australia
- Water licence amendment was signed a few days ago for 10-yr term; wanted ability to draw water from Exeter Lake if needed for processing; changed definition of 'receiving environment',
- ICRP version 3.1 was submitted
- Point Lake project was approved early 2023, concerns with caribou and waste rock
- WMMP in process of being updated
- AEMP Update Small-bodied fish are sampled every 3 years, large-bodied fish sampled every 6 years, benthics sampled annually. Selenium has been increasing, mercury has been increasing in Kodiak Lake, source is currently being investigated
- Lots of waste piles at Ekati, more spread out/linear disturbance than at Diavik
- Acid rock drainage was a concern in some waste rock piles, created a "seepage response framework" for criteria applying to seepage; concept was in water licence but framework has not been accepted

Q: What will happen with water from Exeter?

A: Will be used to top up Long Lake Containment Facility and eventually fill pits.

• IEMA concerned about managing additional water.

Q: Status of Underwater Remote Mining project?

A: On hold for now. Mine is looking for ways to extend mine life – stockpiled low grade ore at Fox Pit. May apply to go underground at Point Lake

- Noted concern that Point Lake project did not have an environmental assessment.
- Point Lake Waste Rock Pile is in a caribou movement corridor. Waste Rock is also a concern due to potential acid generation. Proposed pile location was moved to avoid seepage concerns.

Q. How involved does IEMA get in the security holding?

A. Board provides fair amount of input.

- Noted that Burgundy market capitalization is less than the cost of reclamation.
- IEMA is very concerned that Ekati is high risk to GNWT taxpayers; security is more than mine is worth. Worth 155 million and security is 300 million.
- GNWT is also concerned; has been looking into updating securities, as security doesn't include money to
 create an ice road during closure. GNWT sent IR to Ekati, De Beers, and Diavik to determine cost of building
 an ice road
- Diavik thinks GNWT is underestimating cost of closing waste rock piles
- Burgundy is supposed to provide cash to replace surety bonds for security, but is behind on payments
- 25% of earnings was supposed to go to payments the surety bond holders don't want to carry this risk

Q: What behaviour monitoring does Ekati do for caribou, and could we align DDMI and Ekati's monitoring? A: IEMA did telemetry study a few years ago on caribou movement around the mine. Mine also has a camera grid. Combination of behaviour, telemetry, traffic, and camera data are used to see whether mine has effect and to inform mitigation. Not sure how systematic Ekati behaviour monitoring is.

Note that Ekati has WMMP and Road Mitigation Study.



- IEMA is more focused on collar data
- Drivers at Ekati see caribou chased by a wolf across the road, use Misery/Point Lake for migration.
- BOTG have a camp near Lac de Sauvage, and noticed that caribou trails that used to be well-used have become very grown in, could tell those trails are no longer being used. Caribou seem to be using different routes to the east of the mine.
- Good to see PK deposited in pits.
- Noted that Ekati is seeing Selenium in Long Lake sediment, but not in water. IEMA wants to add sediment sampling for Selenium to the response framework this will likely be addressed in the AEMP

13. Inspector's Report

Inspector Joe Heron presented a report on DDMI water licence inspections for first time since Feb 2023

- A418 closure all hazardous materials removed. Pit deemed closed Sep 4'23.
- Once PK rises to 9245 level Diavik will start to decant PK water
- A21 underground most of the project is signed off.
- Exploration program some clean up required
- Pond 12 liner accidentally ripped liner during maintenance; Diavik built a plug to contain water until breaching.
- Fuel and waste management some problems noted; these have been fixed

Q: Does engineered pit where ANFO bags are burnt have a filter for emissions?

A: The way the pit is designed, it doesn't drain; any liquid is contained.

Q: is there testing of water in A418?

A: any water goes to treatment plant.

Q. Will there be a cap on A418 PK before water is added?

A. No, PK will settle and water will go on top

Closing Prayer - Charlie Catholique

Motion: to adjourn the meeting

Moved: Marc Whitford Seconded: William Aglukkaq

Motion carried

Next meeting February 6-7, 2024.