

WORKING WITH THE PEOPLE FOR THE ENVIRONMENT



Minutes – June 26-29, 2023

Yellowknife Boardroom and by teleconference / Zoom

Present:

Charlie Catholique, *Chair*
Violet Camsell-Blondin, *Secretary-Treasurer*
Marc Whitford, *Director*
Kelly Fischer, *Director*
William Aglukkaq, *Alternate*
Gord Macdonald, *Director* (by phone)

Lutselk'e Dene First Nation
Tlicho Government
North Slave Metis Alliance
GNWT
Kitikmeot Inuit Association
Diavik Diamond Mines

Absent:

Staff:

John McCullum, *Executive Director*
(minutes)

Environmental Monitoring Advisory Board

Guests:

Sean Erasmus, Observer, YKDFN (in person)
Rainie Sharpe, WSP (Day 1 -by phone)
Sonia Aredes, SLEMA (Day 1 - in person)
Jose Audet-Lecouffe, DFO (Day 2 - in person)
Chris Shapka, DFO (Day 2 - in person)

Monday June 26, 2023

Meeting started at 9:05 am at EMAB Boardroom and by teleconference

Chair begins meeting with a prayer.

Item 1: Approval of Agenda

Chair reviews agenda.
Item 7: Inspector's Report cancelled.
Item 12: WMMP Addendum motion rescheduled for the next meeting.

Motion: to approve agenda for June 26-29, 2023 meeting as amended

Moved: Marc Whitford

Seconded: Violet Camsell-Blondin

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 April 18-19, 2023 meeting minutes:

Moved: Marc Whitford

Seconded: Violet Camsell-Blondin

Motion carried.

None against, no abstentions.

Motion: to approve May 24, 2023 meeting minutes:

Moved: Charlie Catholique

Seconded: Kelly Fischer

Motion carried.

None against, no abstentions.

Email motions read into minutes

Review of Action Items

- Reminder to send meeting materials by email
- Noted that TKWG meetings were cancelled due to recent hearings for Diavik and Ekati

Outstanding recommendations

- Follow-up with TK Working Group on request for observer status
- Follow up with Diavik on March 1'23 letter on principles for future TK Panels
- Noted that EMAB agreed to return contributions repayable within two months of approval of audit, if no outstanding requests to roll over funds
- Discussion on TK Monitoring working group
 - Updated on status of TKWG; rep from each community
 - TKWG is struggling to find times for meetings that all members can attend
 - Working on setting up an organization: Draft ToR;
- ZOI – see item 11

Item 4: Finance

ED presents item

- Unspent amount at March 31'23 all returnable?
- Yes
- Noted that more funds are needed to do adequate community updates. May need to request rolling over funds from 2022-23.

Action Item: ED to review community updates budget to make sure it tracks with current costs

- Good for entire Board to go to communities.

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Honoring Jack Kaniak

- EMAB should recognize his contribution
- Maybe a plaque?
- Contribute Jack's honorarium for May preparation days to family

Motion: to contribute Jack Kaniak's May 2023 preparation days payment to his family

Moved: Marc Whitford

Seconded: Gord Macdonald

Motion carried.

None against, no abstentions.

Action Item: Gord Macdonald will provide family contact information to ED.

ED Performance Evaluation

ED leaves – no minutes

Motion: to approve Personnel Committee recommendation for retroactive salary increase of 5%.

Moved: Marc Whitford

Seconded: William Aglukkaq

Motion carried.

None against, no abstentions.

BREAK

Item 6: TK Fish Camp Follow-up

Rainie Sharpe from WSP presents findings of TK Fish Camp Follow-up Study

TK Fish Camp Follow-up Study

Q: has TK Panel reviewed this presentation?

A: presentation was sent to TK Panel. Report is being finalized and will go to the Panel when it's ready.

- Nancy Kadlun attended on behalf of TK Panel
- 1 fish in each session was over Health Canada mercury guidelines
 - Within ranges found in LdG and nationally
- Collection of parasites has been variable over the years so hard to compare from camp to camp
 - Table showing parasite type and year
 - Parasites not unique to LdG
 - Small sample limits analysis and confidence
 - Trend has not changed over time
 - Fish were 12 to 27 years old; all had parasites

Discussion

Q: is it normal for all the fish to have parasites?

A: usually 1 or 2 fish with no parasites; not alarming compared to other lakes

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Q: what is the cause?

A: natural cycles, temperature, hosts, food. All parasites have been present over the years; nothing new.

Q: any tumours?

A: haven't seen this in the data. Would expect some. Sometimes slimy sculpin have bumps that could be tumours.

Q: what is the source of the mercury?

A: long-range transport such as coal-burning power plants. Mercury gets into atmosphere and falls out in the north. No evidence mine is contributing mercury in amounts that would make a difference.

- Noted that a study in Nunavut identified a small lake with high levels of mercury and no development nearby.

Q: when will these results be presented to the Elders?

A: Diavik has no plans to present to them

- Request that Diavik inform EMAB if there is a presentation to the Elders.

Q: what role did Nancy play?

A: TK Panel requested an observer. She also helped with fishing and initial processing

Q: what were Nancy's views on what she saw compared to the 2021 Fish Camp?

A: hesitate to put words in her mouth. Suggest EMAB speak to Nancy directly. There were some conversations with Nancy and these were recorded.

Q: how did the parasite load compare to previous camps?

A: not able to say; not enough data. Parasite load was not recorded in the past. Noted that parasite load was low in 2018 so might explain why participants reacted to number in 2021.

Q: does permafrost melting release chemicals that might harm fish?

A: not enough information to say. Would expect to see evidence in AEMP sampling.

- Paul Vescei said fish with big heads and skinny bodies might be due to old fish, since people don't fish in LdG now.

Q: was there a comparison of age compared to big heads with skinny bodies?

A: there were some old fish in the sample

Q: any risk to humans?

A: some parasites could affect humans if not cooked to minimum temperature or frozen at -20C for 7 days.

Q: how sick could you get?

A: depends on the person. Thinks it's treatable (not an expert in human health).

- Suggestion to put presentation in more plain language.

LUNCH

Item 6: TK Fish Camp Follow-up (continued)

TK Fish Camp Workshop Proposal

ED presents draft TK Fish Camp Workshop proposal

Discussion

- Include Diavik as a participant

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- Include Rainie Sharp and Paul Vescei as biologists
- Remove references to mitigation; assumes there is something that needs to be mitigated; monitoring would be good to include if there's time.
- Confirm focus is on 2021 Fish Camp
- Could mercury in fish result from seepage or a cycle, or a disturbance
- Noted there is a lot of mercury in the north; most comes from other places and is deposited here (China, India etc)
- Suggestion about "significant changes"; refer to the participants' observations
- Identify lessons learned so not seen as trying to influence future plans for TK Monitoring of closure
- Noted some participants are no longer with us: Jack Kaniak and Albert Boucher
- Approach – ask Parties to send "best fish people"
- Ask Parties to send participants who have knowledge of fish, particularly LdG
- Not fair to ask fish biologists to decide whether fish are safe to eat; this is different expertise
- Noted that if people catch fish when on the land they will cut out the part that seems unhealthy and eat the rest
- Consider removing any question of whether fish are safe to eat
- Important to consider cultural appropriateness, such as cultural use criteria
- Might try eating a fish if a scientist says it's safe
- Noted scientific sampling of fish at LdG started in 1996; fish camps didn't start until 2003.

Continue discussion after SLEMA presentation

Item 9 – Snap Lake Closure Update

Sonia Aredes from SLEMA presented an update.

Key Features:

- North Pile (processed PK)
- Collection ponds surrounding North Pile
- Water Management Pond that receives water from collection ponds
- Runoff currently pumped to Snap Lake through a diffuser. After closure it will flow directly

Chronology

- 2004 – startup
- 2015 – enter care and maintenance
- 2017 – flooded workings
- 2021 – FCRP partly approved
- 2022 (March) – begin active closure
- 2022 (December) – FCRP approved

Active closure from 2022 to 2024. Post-closure monitoring for 10 years

Water Management post-closure

- Collection ponds flow to storage ponds, then to Snap Lake
 - PK runoff (saline) plus surface runoff

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- Monitoring water quality and quantity
- Sampling plus AEMP
- Anticipate possible increase in TSS, sewage and oil spills during active closure
- Safety and aesthetics important for future cultural use
- MVEIRB required no trace of effluent (TDS) where flow enters Mackay Lake, approx. 44 km downstream

Post-closure monitoring

- No visible erosion, including cover on tailings pile
- Forecast done for 50 years
- SNP - Changes in concentration of discharge over time; must be safe for humans, wildlife and aquatic life.
 - Meet Drinking Water Guidelines in Snap Lake
- AEMP monitors water quality, sediment, toxicity, plankton, benthics and fish.

Q: how much water quality change is allowed?

A: benchmarks ensure water is not harmful. If water quality is predicted to exceed benchmarks within 50 years then treatment is required.

Q: are they using cameras to monitor wildlife?

A: wildlife monitoring is still being discussed. Cameras are currently used when staff are not on site

Q: water management program?

A: only during active closure. No management post-closure

Q: does SLEMA accept the monitoring program?

A: SLEMA accepted most parts

Q: TK Monitoring?

A: incorporated TK Panel recommendations. Final site inspections will include TK recommendations.

Q: how are Elders involved?

A: Elders participate in inspections. Snap is still working on the revegetation program.

Q: why choose 50 years for forecast period?

A: SLEMA asked for 100 years and De Beers agreed, but it was changed at the last minute. Monitoring results will be evaluated at that time and there will be a decision on whether to extend the forecast period if the trend is to exceed the closure criteria. SLEMA asked for 25 years of TK Monitoring. De Beers agreed if salinity is increasing in the PK Pile. Key point is that the monitoring starts after treatment stopped in 2022.

Key Monitoring

- Monitor field pH, not lab
- Sewage: coliforms increased
- Manganese increased – close to Drinking Water Guidelines
- Ammonia – toxicity increases as pH increases

Revegetation success criteria still in discussion

- Diversity etc



- Proposed cover roughly 5%

Wildlife monitoring – SLEMA proposed 25 years

- Presence, diversity, mortality

Q: what is the hardness level of the water?

A: 120 mg/l now, and increasing. Higher hardness decreases toxicity of other parameters

Demolition – some salvage. Demolition expected to be completed this year. Next year they will do earthworks and revegetation.

Item 6: TK Fish Camp Follow-up (continued)

Fish Camp Workshop

Discussion continued on TK Fish Camp Workshop proposal

- Facilitator should be independent ie. not Natasha/Joanne
- Joanne and Natasha have a wealth of knowledge and experience with TK Panel. They should be asked to bid.
- Noted that Diavik generally pays \$350 -\$400/day for TK Panel participants.

Action Item: ED to revise proposal based on comments, send for Board approval by email motion then send to Diavik for review. Following Diavik agreement, send RFP for proposal.

Previous Diavik letters on TK

- Fish Camp Video – no further follow-up required
- Investigation of dust and sediment

Action Item: send TK Panel recommendation, and EMAB recommendation, on investigating dust effects on water and sediment to TK Working Group.

Item 5: Update on TK Working Group

ED presents item.

TK Working Group

- No responses to EMAB's request to be included as an observer on the TKWG
- Noted that Sean sent in a brief summary of one of the meetings. It would be helpful if others could forward any minutes to EMAB. Some Board members do not sit on the TKWG; EMAB should stay up to speed.

Discussion

- Noted that Myra from Diavik took notes at the last TKWG meeting
- Myra's notes are for internal use only; won't provide to EMAB
- Sean/Ryan chaired the last TKWG meeting
- Marc can provide meeting minutes to EMAB
- TKWG can discuss distribution of meeting notes at next meeting.

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Update:

- Developed a role description for a TKWG Executive Director
- Discussion on how TKWG should be organized
 - Federal Societies Act
 - NWT Societies Act
 - Noted federal act is more modern

Discussion:

Q: were the Acts compared?

A: Diavik legal counsel did a pros and cons and recommended the federal act

- TKWG will discuss and decided

Q: how is the agenda for the TKWG decided?

A: TKWG has a rotating Chair. At end of meeting people say what they'd like to talk about at the next meeting.

- Noted that Diavik is currently administering the group but would prefer not to.

Q: who is chairing the next meeting?

A: not decided yet. Possibly NSMA

Action Item: EMAB to request TKWG members to include giving EMAB observer status on next agenda

Closure Watching Program in Diavik FCRP

- Program was included on agenda of first TKWG.
- Have decided to refer to monitoring, not watching.

Item 8: Water Licence Amendment Hearing Update

ED presents item from kit

Discussion:

- During discussion on copper levels ECCC said it couldn't provide information. TG raised the issue of accessing the MDMER database. This also came up at the Ekati hearing
- ECCC did provide data for copper, but not for silver or uranium
- It would be good to be able to access the data
- ECCC released about 20K of test data on copper; huge database.

Meeting adjourned at 5:00 pm

Tuesday June 27, 2023

Chair opens meeting at 9:05 am (EMAB Boardroom and by teleconference)

Chair reviews the agenda.

Item 10 – GNWT Air Quality Guideline Update

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ED presents item from kit

- GNWT rep not available for this meeting. He will be at the next meeting to answer questions.
- Minister is investigating Diavik's EAQMP. He gave Diavik an opportunity to provide more evidence. Received Diavik evidence on May 29. No timeline but investigation expected to wind up in June.

Discussion:

- Dust between TSP and PM2.5?
- Ask GNWT at next meeting

Q: isn't all dust captured?

A: just dust that falls into gauges

Q: why isn't OHS included:

A: Outside ECC's mandate

- Suggestion that EMAB collaborate with Diavik. Now that Guideline is in place Diavik and EMAB can work toward solutions. Noted that yellow haze discussion was on hold pending Guideline
- Reach a resolution without the Minister
- Seems like a good idea
- What about Ekati, will both mines work together?
- The mines share some information, but not much cooperation

Q: what happens if there is an issue that involves both mines?

A: they work out the cause and decide who is responsible. Air and wildlife are likely affected by both mines

Q: is Ekati monitoring PM2.5?

A: don't know. Ask GNWT.

- Diavik had planned to do TSP for a period of time
- EMAB and Diavik had planned a workshop but it was cancelled
- Board felt Diavik and EMAB were too far apart and not making progress towards agreement, so decided to request Minister's investigation
- Main problem was too many holes in data collection

Q: Does EMAB want monitoring to go longer, or become permanent?

A: suggest reviewing original EMAB letter to define the issues

Q: how would an EMAB / Diavik process fit into the Minister's decision-making process?

A: can do both independently

Q: is Minister's decision binding?

- Suggestion that Board get caught up on the issues that EMAB raised to the Minister. This is a few years ago and it would be good to review EMAB's letter.
- Likely a way forward if EMAB wants to participate. Guidance document clarifies that TSP monitoring is required. Yellow haze issue has not been dealt with.

Action Item: ED to circulate EMAB letter to Minister on investigating EAQMP to Board for review. Board will then decide next steps.



Item 11 – 2022 WMMP Report Update

ED presents item from kit.

2022 WMP Report

Agreed to wait for MSES review of 2022 WMMP report before proceeding with Board review.

ZOI Analysis Methods

- Staff recommendation to follow up with Diavik and ECC on status of review
- Diavik rep doesn't think ECC has passed on EMAB comments on ZOI Analysis to Diavik
- Suggest EMAB call ECC and ask about the status of this.
- Might be better to send a letter as well; have something in writing.
- Invite ECC wildlife reps to next meeting

Action Item: ED to call ECC for status update on review of ZOI Analysis Methods and prepare a letter requesting an update.

Action Item: Invite ECC wildlife reps to next EMAB meeting to discuss ZOI Analysis.

Caribou Behaviour Monitoring

- Noted that ECC has not made a decision, and has asked Diavik to collaborate with EMAB and respond by July 15
- Suggest EMAB meet with Diavik and ECC on Diavik collaboration with EMAB on this
- Ask mine to report on what action they take with incidental wildlife sightings at next meeting
 - Gord will follow up with a verbal request for a report on incidental sightings.
- Suggest a one-day meeting with ECC, Diavik and EMAB biologists on improving caribou behavior monitoring. Include Petter from BOTG and report back to Board

Action Item: Gord to make request to Diavik to provide a report to Board on how incidental wildlife sightings are actioned.

Action Item: ED to arrange a meeting with biologists from ECC, Diavik and MSES to discuss improving caribou behaviour monitoring. Include Petter Jacobsen.

BREAK

Item 14 – EMAB Relationship with Diavik

ED presents item from kit

Discussion:

- Need to do a reset
- Diavik rep notes that Diavik comments at recent hearing were unfortunate. It was a stressful part of the hearing.
 - Diavik doesn't feel EMAB reaches out to try to resolve comments the same way other groups do.
 - EMAB comments on FCRP engagement hurt

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- Comments are important. EMAB doesn't want to upset anyone. Diavik must do closure right. Not happy with Diavik discussion at hearing. We need to work together.
- Discussion between Diavik and EMAB ED to set up a process.
- Diavik and EMAB working towards same place. Seems like EMAB comments are only negative
- Understood that Diavik makes a lot of effort
- Diavik rep to pass comments on to Sean.

Action Item: EMAB and Diavik to set up a process to review comments with Diavik before submission

Item 15 – Round Table

Marc: concerns about longevity of mine. NSMA is a small group and has less resources than some others.

Kelly: no comment

William: new to this so mostly observing. Environment is number one community concern.

Charlie: lots of talk about climate change at home. Ice has changed – gone from big lake by end of May; river melted in place, doesn't get as thick in winter. Ice was frozen at bottom of river with water flowing on top. Things are changing for the worse.

- Very busy in community: That Dene Nene implementation. Acting SAO. Not able to arrange a time for an EMAB update.
- Dene Assembly July 18-20 in Fort Smith/Fort Fitz
- Lac st Anne July 21-27
- Reliance Gathering – first week of August

Marc: NSMA building a community freezer

Charlie: three big legal issues: Denesoline Corporation, ENR raid on culture camp, Cows & Ploughs.

Gord: no comment

Violet: Tlicho Gathering in Gameti this year. Will Diavik attend if invited?

Gord: yes

Q: Is Diavik planning a closure celebration?

A: A little early for that. Planning a 20-year anniversary celebration.

Violet: monthly briefing to leadership.

- Several Elders participated in recent Diavik WL hearing
- Considering a request to work on some items raised at the hearing
- Bi-weekly meetings of TKWG.



Item 13 – DFO Discussion

Jose Audet-Lecouffe and Chris Shapka from DFO joined the meeting

ED introduces item

Frame Lake Rehabilitation

Jose: Diavik looking for another habitat offsetting project; had discussions with DFO

- Frame Lake identified as a good project
- Two phases:
 - Install aerator and assess effect on overwintering habitat and sediment
 - This is called a complementary measure; it provides useful information for future projects
 - Lack of research in the north
 - Provides 8.5 habitat units (based on costs)
 - Will be installed in summer 2023
 - If project succeeds may stock Frame Lake with fish; need data to decide
- Frame Lake outside LKDFN jurisdiction.
 - Lake may be contaminated – could you eat fish from there?
 - Why choose a project so far from mine?

Jose – hard to find habitat offsetting projects in the north. Most of the environment is undamaged. DFO prefers to do projects in the area of impact. The research will be beneficial.

Q: how will research benefit?

A: could apply to other projects; likely not Diavik

- Noted fish die-off in Pontoon Lake a few years ago. An aerator might have helped there.

Jose notes this is the furthest north this kind of aerator has been used.

- They have been used in eutrophic systems in southern US.

Q: why spend money on a contaminated lake?

A: value in learning whether the aerator works to create habitat, and whether it has an effect on sediments

- Diavik did not cause contamination in Frame Lake. Is there any baseline?

Jose: Diavik collected baseline data during feasibility assessment.

Q: any fish?

A: no. Can't survive overwinter.

Q: any effects on ice?

A: the aerator is not a bubbler, so shouldn't affect ice. DFO is aware of how much use Frame Lake gets from snowmobilers, skiers etc.

Q: EMAB commented on this project in the FCRP. How do those comments affect DFO approval? What is DFO's consultation process?

A: there was an existing Fisheries Authorization that is being amended. Comments on the FCRP will be considered. DFO can also have direct discussions.

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DFO review of Diavik documents

- EMAB has been critical of amount of review DFO does compared to the past

Q: have there been any changes to this?

A: the Designation Order with ECCC still stands. DFO works with ECCC where issues overlap such as TSS

- If EMAB has concerns, flag them to DFO – Jose and Chris.

Action Item: ED to prepare letter conveying EMAB concerns about DFO reviews for Board review and approval.

Meeting adjourned.

LUNCH

Workshop on Future of EMAB continues for rest of day and all of Wednesday June 28.

Facilitated by Shauna Morgan

Workshop report will be circulated to Board.

Next meeting September 5 to 7.

Cancel scheduled August meeting

Chair makes Closing Remarks and Prayer – remember the Elders who have worked hard to protect the environment around the mines. Thanks them for their hard work.

Diavik Site Visit took place Thursday June 29. Attended by Charlie Catholique and John McCullum.