

Minutes – September 9-10 2020 Yellowknife Boardroom and by teleconference / Zoom

Present:

Charlie Catholique, *Chair* Jack Kaniak, *Vice-Chair* Violet Camsell-Blondin, *Secretary Treasurer* Laurie McGregor, *Alternate* (by phone) Gord Macdonald, *Director* (by phone) Marc Whitford, *Director*

Absent:

Sarah Gillis, Director

Staff:

John McCullum, *Executive Director* (minutes)

Guests (all by phone):

Chief Edward Sangris (Day 1) Longinus Ekwe, TG (Day 1 & 2) Abbie Stewart, MSES (Day 2) Bill Slater, Slater Consulting (Day 2) Bill Pain, ENR (Day2) Randy Knapp, Consultant (Day 2) Barbara Hard, Arcadis Canada (Day 2) Meghan Schnurr, WLWB (Day 2) Hamsha Pathmanathan, ENR (Day 2) Bryana Matthews, ENR (Day 2) Tom Bradbury, Lands (Day 2) Lutsel K'e Dene First Nation Kitikmeot Inuit Association Tlicho Government GNWT Diavik Diamond Mines North Slave Metis Alliance

Yellowknives Dene First Nation

Environmental Monitoring Advisory Board

Wednesday September 9, 2020 Meeting at 10:50 am at EMAB Boardroom and by teleconference (following AGM)

1. Call to Order

Meeting called to order at 10:50 am

2. Approval of Agenda

Chair reviews agenda

Motion: to approve agenda for September 9-10'20 meeting



Moved: Jack Kaniak **Second:** Marc Whitford Motion carried

3. Conflict of Interest

No conflicts declared

4. Minutes of Previous Meeting

Motion: to approve August 18-19'20 meeting minutes as presented: Moved: Marc Whitford Second: Violet Camsell-Blondin Motion carried.

Executive Director (ED) reviews action items

Action Item: ED to look into donating recently replaced staff and Board laptops to schools in Affected Communities.

Action Item: ED to look into putting Board calendar into Dropbox.

Discussion on Yellow Haze letter follow-up

- Suggestion to take a new set of photos of yellow haze
- Noted this has to be done on cold, calm days
- YKDFN Chief concerned about Diavik not being in compliance on air quality
- Diavik seems to be denying the yellow haze exists this is unacceptable
- Want Diavik to check to see if haze is a problem; if it is, mitigate
- It is EMAB's job to raise these issues.
- EMAB needs proof
- Agreed to follow up at a later meeting

Executive Director reviews outstanding recommendations. None at present.

5. Finance

ST reviews variance report.

ST proposes increasing ED spending authority to improve efficiency of EMAB.

Motion: to increase Executive Director Spending Authority to Ten Thousand dollars (\$10,000) per expenditure Moved: Marc Whitford Second: Jack Kaniak carried



6. Annual Report Text

Motion: To approve the text of the 2019-20 Annual Report as presented Moved: Violet Camsell-Blondin Second: Marc Whitford carried

7. PKMW Workplan Comments

ED presents draft letter

Discussion:

- Suggested EMAB look at the WLWB IR to get a better idea of the expected contents of the Post-EA Information Package (PIP)
- Agreed that 14 days is a very tight turn-around to prepare an intervention
- Don't necessarily need a full public review; say "might" be valuable to have a public review of the PIP or a technical session.
- Given amount of time already gone by, an extension is probably not workable
- Need more time for EMAB and communities to fully participate; proceeding seems rushed
- WLWB has a duty of procedural fairness
- Can't tell how much review will be required until we see the PIP; 14 days is not enough
- Need to review whole document even if much of it is made up of previously submitted information

Motion: To approve the letter to WLWB on the PKMW Workplan as amended. Moved: Marc Whitford Second: Violet Camsell-Blondin Carried

Carried

Meeting adjourned for the day at 12:45 pm

Thursday September 10, 2020 Meeting opened at 1:05 am at EMAB Boardroom and by teleconference

8. Diavik Request for NWRSA Security Relinquishment

Bill Pain presented an overview on behalf of ENR

- GNWT supports Diavik's Reclamation Completion Reports for the NWRSA.
- GNWT and Diavik reached consensus on the security amount and refund
- GNWT offered some suggestions for future RCRs.
- More discussion is needed with WLWB on holdbacks
 - Frequency of requests; ensure there are not too many



- Process for developing guidance on holdbacks
- Will bring in parties, industry etc later in the process

Discussion

- Confirmed that GNWT will consult on this process
- Q: was a holdback applied to the refund request?

A: no

Bill Slater presented his review of the RCR reports and refund request

- Not clear whether all required follow-up was done
- Moisture content was low in some samples
- Solution is to add more rock this relates to holdbacks
- In the past GNWT wanted increased contingency for this, but they have dropped that demand
- Return of security assumes cover will work as predicted
 - o But there is uncertainty that should be taken into account on the refund

Diavik representative provided additional information

- WLWB distinguishes between a plan and a design; the design for the NWRSA is final
- Holdbacks are included in a separate section of the RECLAIM estimate; the proposed refund doesn't affect the holdback

Noted that the methodology for determining holdbacks is still under development

Q: how long is a holdback kept?

A: GNWT is still working on this to provide more clarity; Diavik has not requested return of any holdbacks. Objective is that the holdback will be released at some point.

Q: what is the difference between a design and a plan?

A: Design is specific; plan is broader

- If plan changes, design might change
- For example, the final shape of the NWRSA might change
- changes would show up on as-built drawings
 - yes, but plan would be changed before then

9. Review of ICRP Comments/Recommendations

Abbie Stewart from MSES presented review of wildlife / habitat related closure criteria (report and presentation included in meeting materials).

• Need clarification on criteria SW4, SW5, SW8, SW10 and M8 as well as on monitoring achievement of criteria.

No questions.

Barbara Hard from Arcadis Canada presented their review of the criteria for water consumption and aquatic health in Table 2 of Appendix V of the ICRP (report and recommendations in meeting materials)



- A number of criteria are missing or need more information on how they were arrived at
- Lack of closure criteria for vegetation contamination is a huge data gap
- Q: What would be the health effects on humans of the Contaminants of Concern (COC) that were left out? A: That would depend on the concentration of the contaminant and the frequency of drinking. It could affect organs or overall health.

Q: how far might the contaminants travel and still be a risk?

A: Couldn't confirm Diavik models; likely safe beyond 1000 meters, possible less.

Break

Item 9: ICRP Review/Discussion (cont.)

ED notes that the presentations have been completed. All comments have been compiled in comment/recommendation table and updated versions were circulated to all Board members for review when they were completed. These have all been reviewed by the Board in this meeting or previous ones, and most of them have been reviewed by Diavik, including meetings with consultants and EMAB staff. Suggested that the Board not review the comments one-by-one; instead go through key issues identified at August meeting. ED has prepared background on each of these five issues, Board could then discuss.

Agreed to follow this approach

Mixing Zones

ED presents background on Mixing Zones from kit

Discussion

- Noted that MVLWB mixing zone guidelines are operational rather than for closure
- Noted that mixing zones will not exceed acute guidelines for aquatic health
- Q: will effects decrease over the long term?

A (Diavik): Source of chemicals is the rock so effects will last for a very long time. Note that mixing zone sizes are a maximum, just before the ice comes off the lake. Once the ice is clear, wind and wave action will make the mixing zone disappear.

Q: two numbers presented for maximum mixing zone size: 237 hectares or 47 hectares. Which is better?

A: Diavik concluded it was not feasible to do passive treatment; might be possible to re-route some flow, but this would result in land disturbance.

Q: are there any other ways to reduce contamination at source?

A: chemistry comes from rock; it might be possible to cover the rock with cleaner rock

Q: role of dust?

- A: very little contribution
- Q: what about sediment within the mixing zone? How will it be affected? Will it be tested?
- A: there is potential for build-up of chemicals in sediments; this will need to be monitored
- Q: is there a need to remediate the sediment around the island?
- A: runoff from the island is clear, so there are no deposits of sediment
- Q: can sediment build up over time?
- A: it disperses when the ice comes off, builds up when ice comes back



Q: what about the PKC as a source?

A: PKC does contribute, but main source is the rock

Q: can chemicals get into the sediments? Might these need to be remediated?

A: Fair point

Noted that while the modelling may not show the worst case, the mixing zone will only be present for part of the year. Mixing zone will vary over time; a heavy rainfall will increase the size. There doesn't seem to be much available in the way of options, except for active treatment.

Measure metals in sediments to monitor. Likely any sediment deposits will end up being flushed into the main lake.

Q: any concern about acute toxicity?

A: main test is the acute lethality test required by federal legislation

Noted that the chemistry of LdG has changed over the period since Diavik started and it will take a long time for it to return to its original state. The zone around East Island will be changed for a long time; the rest of the lake will return to pre-Diavik conditions, except where there are contributions from Ekati or other sources. Noted there is a cumulative impact. Security will not pay for complete remediation.

• Can't always see an effect at the time, but it builds up. Effects will be felt in Kugluktuk.

Chair notes that the Board is behind schedule on agenda and proposes to table Items 10 & 11: the WMMP Program Description and the Inspector's Report. Agreed.

Item 9: ICRP Review/Discussion (cont.)

Suggested that EMAB recommend that Diavik make best efforts to reduce source contamination and meet the MVLWB Mixing Zone Guidelines.

- Diavik should follow the guidelines
- No easy answers
- Noted these issues were identified during the Environmental Assessment in 1998
- Elders are concerned the Diavik project could kill Lac de Gras
- Noted Ekati's Jay Project will affect LdG
- Elders can advise
- Is it possible to meet the MVLWB mixing zone guidelines?
- Guidelines protect the lake ecosystem
- Diavik should do everything possible to meet the guidelines; do their utmost.
- Noted Diavik can meet the guidelines if they put in a water treatment plant

Include wording that a water treatment plant does not appear to be warranted at this time.

Revegetation

ED presents background on Revegetation from kit

Discussion

• Diavik notes the vegetation will grow back everywhere eventually. The U. of A. comment about 100s or 1000s of years was to return to the vegetation that was on the site before development. What level of effort should Diavik use in revegetating these areas? Targeted effort or same level everywhere?



Revegetating the rockpiles was the most discussed recommendation; hasn't heard many people say the PKC should be revegetated.

- TK Panel, EMAB Closure Workshop and community input have all said there should be some vegetation on NWRSA, SWRSA and PKC
- What about the revegetation "islands" recommended by U. of A., making use of available soil and fertilizer, and placing these throughout the site? Diavik has said it doesn't want to do this.
- Diavik agrees they don't want to implement the U. of A. recommendations
- Revegetation islands all over site seems like a good idea so we can achieve 65-70% vegetation. Some areas will be harder than others, but should put equal effort everywhere.
- Proposed to decrease emphasis on pink areas on map and spread the effort out to the rest of the mine
- Eventually will fill in and grow; these would be footholds
- That could work
- Better not to put all eggs in one basket; spread it out.
- Noted Revegetation Plan coming in early 2021
- Current recommendations in table are in line with what is being said.
- Clarify level of effort expected
- Spread out effort beyond pink area
- Say 70% effort on pink areas and 30% on other areas?

Contaminated Soil

ED presents background on contaminated soils from kit

Discussion

- Landfarming: mix soil, put in additives, eventually hydrocarbon content is removed
- Contaminated soil can be shipped out for treatment Swan Hills
- Should treat soil on site and use for revegetation; need as much soil as possible
- Diavik will treat to the best standard they can achieve; Diavik is concerned that treated soil will contribute to contaminated runoff. They would prefer to bury it.
- Concern about possibility of melting permafrost if soil is buried.
- Noted that Ekati has been able to treat contaminated soil to Agricultural Standard
- Diavik should listen to communities and not bury contaminated soil; treat it and use if to grow vegetation
- Preferred option is to treat the soil onsite to Agricultural Standard and use for revegetation
- Diavik notes landfilling will keep the soil frozen in permafrost
- But if soil meets Agricultural Standard, why bury it? It should be clean.
- Should investigate this question
- If soil can't be treated to Agricultural Standard should it be buried or shipped offsite. No consensus.
- EMAB will not recommend on burial vs. shipping offsite; if soil can't be treated to Agricultural Standard EMAB will make a recommendation at that time.

PKC Closure Concept

ED presents background on PKC Closure Concept



Discussion

- Diavik will submit a PKC Closure Plan in early 2021
- There is lots of uncertainty about PKC Closure; current plan is not viable
- Don't know what the cost or contingency for PKC Closure should be until there is a viable plan

Retaining Airstrip

- Diavik would prefer to transfer ownership of the airstrip
- Retaining airstrip means that area will not be revegetated
- There will continue to be an airstrip at Ekati; are two airstrips needed
- Can remove this question from comment table

TK Community-Based Monitoring Program

ED presents background on TK Monitoring

Discussion

- Communities have different processes; TG example
- Diavik wants to ensure the right people are at the TK Panel discussions.
- Role of communities is to review and provide support for TK Panel recommendations on TK Community-Based Monitoring

Motion: to approve the draft Comment/Recommendation table for ICRP 4.1 as amended. Moved: Violet Camsell-Blondin Second: Marc Whitford Carried

Item 12 – Two-year Budget Recommendation

Motion: to approve the draft two-year recommended budget for 2021-2023 as presented for submission to Diavik

Moved: Marc Whitford Second: Violet Camsell-Blondin

Abstained: Gord Macdonald

Carried

Item 13: Roundtable

Tabled to next meeting

Next meeting – October 20-21, 2020

Motion: to adjourn Moved: Marc Whitford Carried



Meeting Adjourned at 5:40 pm