WORKING WITH THE PEOPLE FOR THE ENVIRONMENT



EMAB meeting - Yellowknife - May 17 - 20, 2011

Present:

Doug Crossley, Chair, Kitikmeot Inuit Association Floyd Adlem, Secretary Treasurer, Canada Ted Blondin, Vice Chair, Tlicho Government (arrived 9:45) Charlie Catholique, Lutsel K'e Dene First Nation Sheryl Grieve, North Slave Metis Alliance (arrived 9:45) Steve Ellis, ENR – GNWT Charlene Beanish, GN

Staff:

John McCullum, Executive Director Michele LeTourneau, Communications (also minutes)

Item 1 – Agenda and Minutes

Agenda: Additional items – ED annual performance review & Waste Rock Plan re: type 3 rock

Motion:

Approve agenda, with additions.

Moved: Steve Ellis

Second: Charlie Catholique

Carried

Motion:

Approve December 2010 minutes.

Moved: Floyd Adlem

Second: Charlene Beanish

Carried

Motion:

Approve February 2011 minutes

Moved: Steve Ellis

Changes:

Steve Ellis only present in the morning of Day 2.

Page 3: change "by" to "be"

Second: Charlene Beanish Carried

Motion

Approve March 1, 2010 teleconference minutes

Moved: Steve Ellis

Second: Charlie Catholique

Carried

Motion:

Approve April 6 teleconference minutes

Moved: Floyd Adlem Second: Steve Ellis

Note: Don't forget to note the time the meeting ended.

Carried

Email motion read into minutes. Email Resolution – Feb 8'11

Approval of February 8, 2011 version of two-year budget for 2011-13

Motion: to approve the revised 2011-13 two-year budget dated February 8, 2011

Moved: Ted Blondin Seconded: Audrey Enge

VOTING	For	Against
Charlie Catholique		
Ted Blondin	X	
Lawrence Goulet		
Doug Crossley	X	
Audrey Enge	X	
Steve Ellis	X	
Floyd Adlem (by phone – Feb 9)	<u>X</u>	
Colleen English		
Charlene Beanish	X	

Item 2: Two-year budget proposal

The Minister chose Diavik's budget.
ED reviews the letter from the Minister
Chair reviews Executive Committee discussion

Discussion:

- We should respond to put our concerns on the record.
- Will the Aboriginal Parties comment on this decision?
- Should EMAB write the Aboriginal Parties?
- Should we entertain some form of going public and/or political?
- The decision is made loathe to campaign against INAC or Diavik. We've been doing that for years. It's an uphill climb that's becoming tiresome.

EMAB needs clarification on carrying forward program funding, use of interest and on reallocating funds to the Capacity Funding Program – as the only major difference between the two budgets is Diavik removed Capacity Funding and INAC states EMAB can reallocate funds.

The letter from the Minister is badly justified.

Start by getting clarification from INAC and leave Diavik out of it at this point.

ACTION: Short, to-the-point letter to the Minister to request clarification on a) reallocating funds and b) program carry-forward to INAC. Board to review. ED to approach DIAND for clarification

Board looks at chart with EMAB/Diavik budgets side-by-side.

Discussion:

- Capacity funding is very important to Aboriginal Parties.
- If EMAB runs a full Capacity Program that takes away from a lot of areas. We'll have to cut back on the Capacity Program.
- There are some tenuous uses of funds. There would be more comfort about the program if some of the use wasn't so tenuous. The use really has to be justified.
- The Board should revisit the budget that was put together at the February meeting.
- It's clear Diavik doesn't want the budget to include capacity funding but where does INAC actually stand?
- In some cases there's a real benefit it supplements wildlife and environment committees and staff.
- Two steps: 1) clarification from INAC then 2) decide on capacity funding.
- Q: Is capacity funding a fight we want to take on?

- Aboriginal members can take the INAC letter choosing the Diavik budget to their Parties and they can comment.
- EMAB's mandate should lead to the budget, not the other way around.
- Capacity funding is not specifically in the Environmental Agreement. We need to keep our eye on all the science.
- How are Diavik's budget actions affecting EMAB's ability to do its job.
- Identify where Diavik is failing to meet EA commitments.

Follow-up discussion on Diavik's comments on EMAB's budget:

DCAB: Audrey Enge resigned as Chair for DCAB; an Executive Director has not been hired, according to Audrey the SEMA agreement does not mention DCAB coordinating activities with EMAB.

Diavik has not responded to EMAB's request for further information on Diavik's concerns regarding capacity funding. EMAB should follow-up with Diavik on that unanswered query.

Regarding the investigation into EMAB/DCAB – they still need to have administration before we can do anything.

ACTION: Update Diavik and GNWT on DCAB investigation and note that EMAB is still waiting for a response from them on queries regarding the EMAB budget. For Executive review.

Discussion on whether or not EMAB needs a finance committee. Secretary Treasurer could work with two other people to work on budgets.

ACTION: Floyd will prepare a draft terms of reference for a Finance Committee.

Item 3: Capacity funding

ED presents item from kit.

Discussion on whether EMAB keeps the no-proposal policy or changes it so that proposals are required.

- We need to be accountable for this money, particularly if we do decide to reallocate funds. Proposals increase accountability and give the program more credibility.
- A simple application form is a possibility.
- We can ask a question that gives us the information that we need to determine if there are the links to the program and EA that we require.
- The most difficult part is linking the proposal to the EA, strategic plan and program guidelines

• Proposers do the work, and the Board reviews it. It's not the Board's job to write proposals for people asking money.

ACTION: ED to revise Outcomes section of Capacity Building Proposal format to try to make the linkage requirement less onerous.

Lunch break at 12:00 Back at 1:25

Item 4: EA review

Noted that where DDMI makes a commitment, they include a target date for completion

Motion

Approve SENES report on the Review of the Environmental Agreement implementation for public release.

Moved: Steve Ellis Second: Floyd Adlem

Carried

ACTION: Send the release letter to Aboriginal Parties so that we can get Diavik to pass on their community engagement protocols.

Status of the recommendations – these are listed in the binder.

Noted: It would be greatly appreciated if Diavik could let the EMAB member know when they visit the community.

ACTION: Request that Diavik apprise us of their community visit schedule.

Suggested that EMAB prepare an inventory of Diavik commitments and deadlines.

Discussion about the proposed TK panel and its use:

- EMAB needs to be cautious that Diavik doesn't offload all its commitments on the panel. Panel would be to advise EMAB not Diavik.
- Panel should comment on Diavik TK work not actually do the TK work for Diavik.
- Diavik doesn't understand TK. The camps were the closest they ever got to TK.

Community Engagement protocols

- Nobody seems to know what's going on re: Diavik's community protocols.
 - Parties can tell Diavik they want joint updates with EMAB EMAB should suggest this to Parties
 - o Board members should report back to Parties on interactions with Diavik

 Noted that for NSMA staff have commented on the protocol and passed it on to the leadership

ACTION: Update Parties on implementation of the EA Review recommendations in the conveyance letter of the SENES report.

Item 5: TK in monitoring

Aboriginal Party Proposals

The Tlicho have submitted a TK proposal to Diavik. Diavik has offered to cover less than half of their proposed budget.

Discussion

- Noted that DDMI had offered funds for proposal development in 2007, but this ended in early 2008.
- DDMI's ideas for progress on TK are too reliant on the TK Panel
- EMAB will have to consider, at some point, going to the Minister re: EA compliance regarding TK.
- Will TK Panel decide on proposals? No that's not the intent.
- Panel needs to identify TK needs what should be researched?

Item 6: Inspector

INAC reports that the Ekati and Snap Lake inspectors (Tracey Covey and Jason Brennan) will be covering the Diavik file for the present, as Jennifer Potten has left her position.

Tracey was very impressed with what he saw at Diavik, particularly the way they keep the underground water from contacting contaminants. Jason will likely inspect in June and Tracey in July.

Inspectors are open to hearing any concerns that EMAB may have:

- Follow up on PKC liner tear
- Air quality monitoring
 - o This is largely outside the inspector's jurisdiction

Suggested that next inspection report include slides from the inspection.

Item 7: Closure Plan

Ryan Fequet and Sarah Elsasser from WLWB updated EMAB

The WLWB did not approve version 3.1 of the ICRP, saying there's still major work to be done. There is not enough evidence or information to support the changes they propose. DDMI will have to rewrite the ICRP according to the existing approvals until the evidence and information is available.

There will be a workshop on the PKC. The WLWB also did not approve that plan, and is looking for evidence to support the design changes. The workshop will likely be in September.

They noted that closure criteria need to be developed by all the stakeholders, not just DDMI. WLWB is considering a workshop on development of closure criteria.

Discussion

- Noted that TK research is lacking and is needed
- DDMI's proposed post-closure monitoring period of seven years is too short.
- Who will review the post closure monitoring reports
- What is happening with the security deposit

WLWB Responses

- a) Community engagement
- MVLWB is developing a community engagement policy. This will also affect how TK research is done.
- Rio Tinto interviewed everyone who made comments on the ICRP and received some very direct comments about the process. DDMI made changes as a result of this and are developing a community engagement process.
- DDMI will have to do a progress report on the ICRP every year the WLWB wants the community engagement plans by the time of the first update.
- MVLWB is planning on a community engagement workshop. It will include DDMI and stakeholders. This will happen soon, since closure plan decisions need to be made soon.

b) Security

- DDMI and DIAND have both provided closure estimates
- WLWB is considering getting an independent estimate
- Acid Rock Drainage could be a very big closure issue
 - o Diavik is very conservative in identifying rock with potential for ARD
 - o This means there may not be much "clean" rock available for capping
- c) Long term monitoring
- DDMI may require longer term monitoring for water quality; DDMI accepts this possibility
- That part of the security deposit would be held back until it's signed off
- Noted that the Tlicho claim guarantees water quality

Noted that WLWB may try to have workshops back-to-back for efficiency.

Query on burial of equipment etc. DDMI made a commitment not to do this during the CSR process but there is little documentation – DDMI has been told to engage with communities on this question.

Break

Item: Diavik update

Colleen English joins the meeting by phone

Community engagement

- YKDFN Chief and Council approved community engagement protocol. DDMI has not seen it yet, but it will show a position title for each topic.
- Tlicho working group approved the community engagement protocol last week. Colleen will follow up this week with Ginger
- Had planned to meet with NSMA on May 11 but this was cancelled
- LKDFN no progress
- KIA protocol is being reviewed by John Stephenson

Cultural awareness

• 4 levels: introductory for all employees and visitors; presentations for all employees; leadership training level is in development; and senior management which includes cultural activities in communities.

TK

- Desktop study
 - Database of bibliographies being developed
 - o Expecting a draft report this week

Changes at Diavik

- The president will be changing out. Kim Truter is leaving at the end of June. Rio Tinto has not announced a replacement yet.
- Also the VPs of HR, Finance and Operations are all leaving.
- Erik Madsen is also leaving and a new alternate for EMAB will be announced.
 - o DDMI is deciding whether to change the structure of Erik's group

Return to Item 5: TK

- Discussion on response to DDMI letter about EMAB recommendations
- EMAB's strength flows from the Parties. The Parties need to support that. We need letters of support.
- It would be helpful if the Party leaders could sit down with the Executive and develop a joint letter. Noted that this is quite ambitious. Could the board members help out.

- It would be difficult to achieve unanimity. Maybe the TK Panel workshop could help.
- Might be simpler if EMAB prepared a letter that the Parties could review and sign or request a letter from Parties

Action: Agreed to send out TK recommendation letter to Diavik.

Action: ED to prepare a draft letter to Parties to consider signing on to regarding the need for a TK monitoring program for review by the board.

EMAB meeting - Yellowknife - May 18, 2011

Present

Doug Crossley, Chair, Kitikmeot Inuit Association Ted Blondin, Vice Chair, Tlicho Government Floyd Adlem, Secretary Treasurer, Canada Sheryl Grieve, North Slave Metis Alliance Lawrence Goulet. Yellowknives Dene First Nation Steve Ellis, Government of the Northwest Territories Charlene Beanish, Government of Nunavut Colleen English, Diavik (afternoon only)

Guests

Kristin Moore (DDMI)
John Virgl (Golder)
Dan Coulton (Golder)
James Hudson (CWS)
Nicole McCutchen (ENR)
Jan Adamczewski (ENR)
Robert Mulders (ENR)
Karin Clark (WRRB)
Petr Komers (MSES) by phone
Abbie Stewart (MSES) by phone

Staff

John McCullum (also minutes)

Meeting opens at 9am

Chair opens the meeting

Item 9 - Wildlife Monitoring

Kristin Moore presents **DDMI WMP report**.

Vegetation - no change

- Caribou habitat discussion on loss of caribou habitat due to change of vegetation communities near the mine (JV answers questions)
 - Could TK be used to develop habitat suitability values? Yes.
 - Were Resource Selection Functions used? No this is based on EA predictions and RSF's were not available at the time the EA was done. The Habitat suitability values were based on professional opinion considering forage and predation risk
 - Petr notes that he doesn't put much faith in habitat indices; the question is how much habitat has been lost
- Caribou ZOI no aerial surveys done in 2010. BHPB and DDMI did behavioural surveys cooperatively in May and from July to Oct.
 - Noted that the "near-mine" observations are from Ekati. Few caribou go close to Diavik
- Deflection of caribou migration only assessed from collar data this year.
 Same pattern as predicted
- No caribou mortality
- One day of caribou advisory when there were 120 caribou near the emulsion plant
- Grizzly this was the first year of hair-snagging. It was done in the same areas as the previous "sign" surveys. Had 26 hits in riparian habitat and 21 hits in sedge wetland
 - How do they know the hair was from grizzly? This is an assumption
 - Dan Coulton noted that Snap Lake did similar studies and analyzed the hair - about 70% of hair samples were grizzly
 - o Question have they compared results to previous method? No.
 - Noted that there is a design problem with this study is this bear hair and what kind of bear - the sample design could be improved. Need to be sure what the research question is.
 - There appear to be different objectives from different players this all needs to be discussed and finalized
 - Noted that TK should also be incorporated
 - The rigour of the design can be improved add DNA analysis; increased hit rate is needed, or could use collars. Could increase number of tripods and/or duration of sampling and possibly improve lures
 - Could Dumond's study be helpful? This is a pilot study to find out if this method will work. It's not meant to test the ZOI - that objective was changed

Discussion

- Appears that fox and raven numbers are increasing at WTA
 - This is because of mis-segregated waste DDMI will continue with environmental education of staff
 - They will be looking for nesting on all tall structures this year.

Vegetation Monitoring (John Virgl)

- Some plots are associated with dust gauges
- Data is stratified at species level
- Findings percent lichen is lower next to the minesite and percent litter is higher. This is caused by dust from the mine
- Grasses and forbs are also higher near the mine, likely because the lichen has decreased - the increased litter comes from them
- Not sure if there is a gradient away from mine
- No rare plants found
- DDMI plans to keep monitoring and get a complete inventory of vegetation in each plot.

Discussion

- Could caribou avoidance be related to the reduced lichen? Suggested that this be investigated
- Would dust gauges at each plot help? Yes.
- Can these results be linked to habitat suitability for caribou? The number of sites near the mine is about 10% compared to reference sites. Current caribou habitat loss predictions are only for the physical footprint.
- How far does the effect extend?
- Reducing dust could be a mitigation strategy. DDMI notes that it would be hard to do more to control dust
- Has the effectiveness of current dust control been assessed? For example, could there be more frequent watering of roads?
- If dust is related to ZOI, why not mitigate? Noted that cause of ZOI is unknown, and is probably not a single mechanism
- The communities are concerned DDMI and ENR are responsible for finding answers about the ZOI
- DDMI should consider re-directing research towards mechanisms
- The direct footprint of the mine is actually larger than the physical footprint because the vegetation is changing. Noted that the prediction was about changes in vegetation, not about the range of the effect. The prediction is not about indirect loss of habitat
- Noted that the area where vegetation has changed must be considered during reclamation. Reclamation is supposed to return the mine as close as possible to original condition. Is there a way to reduce the affected zone now, through adaptive management?

Lichen monitoring (John Virgl)

- There is an effect of the mine on concentrations of metals in lichen near the mine
- Golder's risk assessment shows that the amount of metals in lichen near the mine would not harm caribou, using an assumption that caribou would stay in the affected area all the time.
- Golder is recommending:
 - o the sampling be continued with less reference sites

- o the lichen monitoring be combined with vegetation monitoring
- o the sampling methods remain consistent
- a community assistant be included to select appropriate lichen samples

Discussion

 noted that DDMI had said that if they found a difference between the samples near the mine and reference areas they would sample for a gradient. DDMI response: since there is no risk at the mine, there is no need to sample for a gradient.

Lunch

<u>Item 9 - Wildlife Monitoring (cont.)</u>

Wildlife Effects Analysis (John Virgl and Dan Coulton)

- review of predictions from June 2010 noted that some predictions / objectives were dropped at the session
 - o caribou determine whether the ZOI changes with mine activity; determine whether behaviour changes with distance to mine
 - wolverine provide estimates of abundance and distribution over time
- Query where did these changes come from? A: The Marshall report from September 2009 and the Handley report from June 2010
 - Noted that EMAB has not had a chance to discuss these proposed changes in relation to the DDMI WMP
 - JV points out that the old objectives relate to predictions while the new ones don't
- Analysis
 - Uses "information theory" looking for the simplest model that explains the variation of the data and is predictable
- Caribou
 - o For caribou, each model was run for each year
 - Used max. number of staff to show level of activity affects number of aircraft, vehicle movement, dust, noise and human presence
 - o Propose to continue using the 2009 area for any future aerial surveys
 - Analysis shows ZOI varying from 13 to 44 km.
 - o Issue of not including distance to Ekati in the analysis (did use data from both Diavik and Ekati).
 - Most of the ZOI effect is explained by Ekati JV predicts that if Ekati was factored in, Diavik would show up very little
 - He predicts Lac de Gras is influencing caribou occurrence more than Diavik
 - JV notes that John Boulanger's analyses take Diavik and Ekati into account and result in a ZOI around 15 km.

- Noted that the East/West Island was said by elders to be a place where caribou split in their migration
- Also noted that the Bathurst population has declined a great deal which would affect the data
- Analysis showed:
 - Occurrence negatively correlated with year
 - Distance to mine was important in 6 of 12 years
 - Lac de Gras influenced distribution in 2 of the years
- Has Diavik considered using on-ground cameras and trail mapping?
- Piecewise regression analysis
 - Was the regression "forced"? DDMI used 15, 30 and 40 km
 - Factors were limited in logistic regression. Noted that the analysis is really looking for a zone of avoidance (ZOI) rather than a ZOI
- o Caribou behaviour may be changing at about 5 7 km.
- Noted that this data could be plugged into the "energetic" model to assess effect on caribou condition. Golder points out that the difference inside and outside the behaviour zone is 5-10% and only occurs while animals are in the zone.
- How long do caribou spend in the zone? A few days at the most.
- What effect does excluding distance to Ekati in the analysis have? It raises a lot more questions.
- DDMI states that it will not pay for analysis that should be done by Ekati
- Has anyone done a Resource Function Analysis. Chris Johnson is showing a mine effect using RSF - this study is almost written up. Noted that the study is not showing a very strong effect.
- o Noted that no other mines have shown a ZOI that is as big as this one.
- We need to know why the ZOI is so big.

Wolverine

- Original study was designed to maximize possibility of seeing wolverine sign. It was later changed to a randomized design.
- The analysis gives very little support to an effect of distance, habitat or weather
- Surprising there is no weather effect animals tend not to be out when it's really cold.
- o Is the "hit rate" so low that change can't be detected? Was a power analysis done?
- A power analysis was done when the survey was designed.
- o Analysis shows very little mine effect except two specific periods:
 - Winter 2006
 - Late winter 2009
- Golder notes that temperature was not a variable in the weather analysis

- Mortality/removals would affect results. There have been 12 removals from the area (10 from Ekati, 2 from Diavik). Was this considered? No - this is a good point.
- Do the years when there was a distance effect correlate with years when DDMI did removals? No.

Falcons

- ZOI is 13.9km. Presence of falcons is more likely both close to and far from the mine
- Probability of nest success increases with distance from mine, with the highest likelihood being at Daring Lake. Trend is decreasing over time
- Nest success is not correlated with level of mine activity

Grizzly

 New objective: to determine if mine related activities influence the relative abundance and distribution of grizzly bears in the study area over time

Review of recommendations from WMP 2010

Caribou

- What is the schedule for aerial surveys? How do we define level of mine activity
- DDMI notes that there are some issues regarding aerial surveys
 - Cooperation agreement with Ekati
 - Cost
 - Agreement on what is significant change
- Regarding lack of correlation between caribou ZOI and level of mine activity
 - Have other indexes of mine activity been investigated?
- Aerial survey analysis
 - o DDMI takes the position that they will not do Ekati's analysis for them
 - There is a need for an analysis that factors in distance from both Diavik and Ekati
 - General agreement that John Boulanger's analyses better represent the ZOI for caribou
- Aerial survey start date DDMI will consider starting the surveys in 2012 and proceeding with their proposal of three years of surveys, two years off
 - Queries: Issues raised before included: effect of surveys on caribou, need to get at mechanisms for ZOI, possible use of other methods
- Noted that John Boulanger may do a power analysis of the surveys and the collar data to identify minimum required number of observations.
 - o Boulanger might be able to suggest an approach

Grizzlv

• EMAB/MSES thought there was agreement that hair sampling would replace the previous method of collecting sign. The hair sampling should continue

- ENR confirms that it is not in the process of analyzing grizzly data, or planning any regional grizzly work in the Lac de Gras area DDMI's rationale for eliminating hair snagging in 2011 is wrong on this point.
- ENR appreciates that Dumond's work in the Kitikmeot may have some relevance when the report comes out, but this is not a reason to cut the sampling in 2011. DDMI feels Dumond's work needs to be evaluated
- Discussion on ENR's role in Wildlife Research Permits
 - ENR cannot force a company to do research
- DDMI notes that 34 posts went out last year, all on the south side of Lac de Gras, while Ekati put out 8 posts, all along the Misery Road.
 - DDMI will not do research south of LdG if Ekati is not doing similar research north of LdG - at this time Ekati is planning to put out 13 posts along the Misery Rd. in 2011
- ENR feels coordination is needed among the three diamond mines
- DDMI feels that there is no point in doing any grizzly monitoring given what Ekati is doing.
- ENR will be issuing a letter based on its understanding of the workshops in June and October 2010 (and Sept 2009?)

Chair wraps up discussion with large group and all leave

Board discussion on EMAB next steps

Petr Komers presents to board

- Vegetation is fine
- Caribou is frustrating
- Waste management raises some concerns about increased number of foxes and ravens at WTA
 - Noted that DDMI only started surveying for foxes and ravens in the last few years, so increase is affected by lack of prior data
- Noted that grizzly hair collection has a different objective than DNA analysis
- Noted that ENR is responsible for wildlife, not DIAND

ED reviews Recommendations for Consideration from kit

- Caribou consider including a reference to Boulanger study in a recommendation on caribou
- If there is agreement that DDMI will start aerial surveys in 2012, what is the problem?
- Noted that a lot of effort went into the development of hypotheses with the three mines, but now there seems to be a lack of coordination
- DDMI is incorrectly reporting data EMAB should note this to the Director of Wildlife, who can make changes to the Wildlife Research Permit application
 - General disagreement that the Director of Wildlife can force DDMI to do different research than proposed

- Proposal for a motion to support rotation of three years of aerial surveys starting in 2012 followed by a two year break, then repeat, with a reference to lack of coordination
- Suggested that DDMI should revisit the way data is handled in the analysis
 - Unlikely that collecting more data will show much change in the size of the ZOI (compared to Boulanger's current estimates). The question should be "what can be done to mitigate the size of the ZOI?"
- Need some research on ZOI mechanisms
- So what is our recommendation?
- Problem is lack of data
- EMAB can encourage DDMI to continue to investigate the ZOI and how it can be mitigated
- Motion should encourage mitigation of ZOI and collaboration
- DDMI notes the mines are required to verify impact predictions, not to get at the mechanisms
 - Noted that mines are also required to verify the effectiveness of the mitigation and that the ZOI is larger than predicted
- At what point does this become GNWT's responsibility
- Communities are particularly concerned about the effect of dust on caribou
- EMAB could develop a recommendation regarding collaboration on the WMP revision process
- What does "testable hypothesis" mean

Discussion on motions for consideration

- Convey MSES report to DDMI for response
- Caribou no motion required; DDMI will continue to survey for caribou as proposed
- Grizzly recommend second year of grizzly hair snagging
- Approve MSES report and convey to Parties
- Should continue hair snagging for bears; any DNA work should be coordinated regionally
- Can DDMI go on BHPB claim block to set up hair snagging posts?
 - Yes, but not on leased areas; DDMI will not be going outside the Diavik study area (which does not include the BHPB claim block)
- DDMI should continue discussions on grizzly bear with BHPB
- EMAB can recommend that hair snagging continue
 - o Is this realistic?

Motion: DDMI to carry out the second year of the pilot grizzly hair snagging study in 2011 and ensure that grizzly studies address the predictions regarding a zone of influence on grizzly made by DDMI during the environmental assessment.

Moved: Ted Blondin Seconded: Sheryl Grieve Carried with one abstention and one against

Motion: to adopt the MSES report on the 2010 WMP and convey it to the

Parties, and to DDMI for a response.

Moved: Sheryl Grieve Seconded: Ted Blondin

Carried unanimously

Meeting adjourned at 6 pm

EMAB meeting - Yellowknife May 19, 2011

Present

Doug Crossley, Chair, Kitikmeot Inuit Association Ted Blondin, Vice Chair, Tlicho Government Floyd Adlem, Secretary Treasurer, Canada Hugh McSwain, North Slave Metis Alliance Lawrence Goulet. Yellowknives Dene First Nation Steve Ellis, Government of the Northwest Territories Charlene Beanish, Government of Nunavut Colleen English, Diavik

Guests

Kristin Moore (DDMI)
Gord Macdonald (DDMI) - by phone
Nathen Richea (DIAND)
Anne Wilson (EC)
Kathy Racher (WLWB)
Sarah Elsasser (WLWB)
Bruce Hanna (DFO)
Leanne Zrum (North-South Consultants) - by phone

Staff

John McCullum (also minutes)

Meeting opens at 8:45 am

Chair opens the meeting

Motion: to go in camera

Moved: Ted Blondin

Seconded: Lawrence Goulet

Carried unanimously

Motion: to go ex camera

Moved: Floyd Adlem Seconded: Steve Ellis Carried unanimously

Motion: to support the 2010/11 Executive Director Performance Appraisal and a

3 % salary increment for John McCullum effective May 20, 2011-06-10.

Moved: Steve Ellis

Seconded: Ted Blondin Carried unanimously

Item 10 - Aquatic Monitoring

Kristin Moore presents 2010 AEMP report

- The major conclusions are similar to previous years except that mercury in slimy sculpin near the discharge was found at similar levels to sculpin in reference areas
- Nutrient enrichment continues to be the major effect extent of Chlorophyll a and phosphorous combined is about 15% of LdG.

Water quality

Some low level effects

Plume study

- Similar results under ice and in open water
- Concentration of barium did not exceed 5% and was higher under ice

Dust

Deposition continues to be higher than predicted

Fish

• Mercury levels in Sculpin were similar in near-field and far-field

Discussion

- How is dust controlled?
 - o Main mitigation is watering the haul roads
 - The predicted dust levels may not be the same as the acceptable levels
 - Noted that Ekati has had some oxygen depletions problems due to nutrient fall-out in dust. This is because the lakes at Ekati are small; LdG is much bigger
 - M-lakes? They are outside the dust ZOI so DDMI would not expect an effect. Could DDMI check into this?
- Where does the mercury come from? Why were the levels higher in 2007.
 Any further plans?
 - DDMI has implemented all the studies it can: the mercury is not in the water, or the sediment, or the effluent. DDMI will keep monitoring Sculpin.
 - Encourage DDMI to keep digging for the answer
- What will happen to lead in the dike walls at closure?
 - Work is ongoing to characterize pit water quality at closure
- Noted the Tlicho claim requires maintenance of water quality, quantity and flow. Any changes to water quantity or flow?

- DDMI only measures water levels in LdG
- What is the evidence that LdG will return to pre-development water quality after closure
 - Main effect is nutrient enrichment. There is lots of evidence about recovery of lakes following nutrient increases eg. Experimental Lakes project.
 - The only concern is that the population of fish gets used to the nutrient source and then it stops
- Does DDMI know what proportion of dust is "captured" by watering the roads? This could be modeled.

2011 Monitoring Proposals

Leanne Zrum presents North-South's Technical Memorandum from kit

- Regarding water sampling premature to cut back to one open water sample until data from previous years has been evaluated
- Notes that benthic sampling should be coordinated with sediment sampling in future
- Consider sampling for fish in 2012 to address the differing mercury results in 2007 and 2010
- DDMI notes that phytoplankton report will be available in time for the summary report

Discussion

- Do these monitoring gaps cause any problems for future analysis? That will depend on how the re-design is done. If the revised program is significantly different then it might.
- Kathy Racher noted that the WLWB also reviewed DDMI's proposed revision to the monitoring program and came to the same conclusions as North-South
 - o Sampling should continue for AEMP as per existing AEMP protocol
 - DDMI cannot reduce to a single sample until an evaluation of data is done
 - Staff report will recommend monitoring continue as last year with the exception of sediment and fish
- DDMI has proposed non-lethal sampling of fish how will that work?
 - DDMI will take trout plugs in 20110; length and weight of fish are measured at the same time
- The open water results will need to be assessed before deciding whether or not to reduce sampling to one season
- KIA plays close attention to water quality on the Coppermine R. Kugluktuk wants the water quality on the Coppermine to be monitored. The community is concerned about the lack of monitoring
 - Noted that EMAB made a recommendation about the need for this in 2003-04.
 - Noted that monitoring does take place on the Coppermine. DIAND has sampled once each in summer and winter for the last 2 years. Cost is an issue.

- DIAND recently shared some date from the Coppermine with Kugluktuk.
- Nathen Richea stated there were 5 or 6 sample locations each time and that he would get the correct information and report back
- Doug Crossley will provide a contact address to DIAND for the Hamlet of Kugluktuk.
- o GN noted that the last sampling they were aware of was in 2004.
- EMAB could write to the Manager of Water Resources

Action Item: Nathen from DIAND to provide details on current sampling on Coppermine to Hamlet of Kugluktuk. Doug Crossley to provide contact information for Hamlet of Kugluktuk.

• The plume study was also going to identify correct locations for sampling the mixing zone (1645-19a,b,c). Current study doesn't provide much detail. Need to confirm the location of the mixing zone now that the second diffuser has been added. DDMI notes they did not do that as part of the plume study and are not sure when that will be done.

Break

ED notes that in addition to conveying the North-South (N-S) memo EMAB usually submits its own comments, highlighting issues of concern

- Suggested that the letter mention dust, mercury, nutrients and TK
- Also adaptive management

Action Item: prepare covering letter for N-S report by early next week, then send to board for comment.

Noted that DDMI found some changes in chlorophyll a at some mid-field stations but it doesn't show up on the maps.

- This is because they are showing the combined extent of chlor a and phosphorus.
- Further noted that the concentration of nutrients may not change, but the loads will change.
- DDMI will have to present a thorough argument about this if they propose to cut sampling back to once in open water

Noted that the main emphasis for TK should be on wildlife. There is still concern about mercury in trout, especially if there is a link to nutrient enrichment. This can't be left as unknown.

How is dust control done for the various sources: roads, airstrip, blasting? DDMI avoids using calcium because it's an animal attractant. DDMI does use chemicals on the airstrip - it's a requirement.

Query about the information session on the PKC. This is just starting to be planned along with the WLWB. DDMI submitted a new PKC This was initiated because DDMI submitted a new PKC Operations Plan and there were a lot of comments and questions, so the WLWB wanted DDMI to provide a complete overview.

Discussion of draft letter responding to version 6 of the Waste Rock Management Plan

- It's important to note that the communities could release DDMI from the CSR requirement not to put Type 3 rock in the lake
- Suggested that instead of saying the plan should not be approved EMAB
 could say that paragraph of the plan should be amended to say that DDMI
 must gain the approval of the communities to change the CSR commitment.

Action Item: to revise the letter to WLWB on version 6 of the Waste Rock Management Plan to require that DDMI would have to engage with communities and receive their approval to place Type 3 rock in Lac de Gras before applying to the WLWB, since this is a CSR commitment.

LUNCH

<u>Item 5 - Traditional Knowledge in monitoring update</u>

Update on Aboriginal Party proposals

Tlicho Government sent a proposal to DDMI for \$300K per year. DDMI has indicated it is prepared to provide \$100-\$150K

- Will TG proceed on that basis? The Tlicho need the full amount to do the research. DDMI notes that they met with the Kwe Beh Working Group last week and the group asked DDMI to go back and find out if more funds might be available.
- Is there any role for EMAB to assist in this?
- EMAB can provide encouragement

KIA is still interested but are still deciding what direction they want to go.

TK Panel Workshop

- There is lots of interest in the workshop
- This is a first step will need some form of follow-up. Maybe a working group.

Item 8 - Reports

Financial statement

Secretary-Treasurer presents financial statement. Notes residuals under TK Program and Science Program

- Approximately \$49K would be eligible for carry-over
- Relates to clarification request to DDMI and DIAND.

Motion: to accept the financial statement as presented.

Moved: Floyd Adlem Seconded: Ted Blondin Carried unanimously

Review of GN arrangement on cost-shared travel

Handout circulated

Motion: to continue the cost-sharing agreement for travel of the GN

representative to EMAB meetings.

Moved: Ted Blondin Seconded: Steve Ellis

Noted that it would be good for the GN rep to meeting with the Mayor of Kugluktuk regarding EMAB activities.

Carried unanimously

Finance Committee

Secretary-Treasurer will prepare a draft terms of reference for a Finance Committee for next meeting.

Handout distributed with DDMI budget and EMAB budget developed at the February 2011 EMAB meeting.

Action Item: Secretary-Treasurer to prepare a draft terms of reference for a finance committee for next meeting.

Action Item: ED to provide a comparison of DDMI budget selected by Minister, current EMAB budget and budget from Feb meeting and circulated to Board.

Item 10 - Aquatic monitoring (cont.)

Ammonia update

Steve Bourn presents verbal update. Pits are dry due to pumping from underground. Ammonia monitoring is continuing. A new Ammonia Management Plan will be coming out soon for review, with a focus on continued monitoring.

Most water is intercepted before it gets to mine workings.

Item 11 - Air quality monitoring update

Steve Bourn updates on the Air Quality Monitoring Program

- The March 15, 2011 meeting provided for a way forward.
- On March 31 DDMI, Golder, GNWT and EC met to finalize the scope and approach to the AQMP. DDMI is modelling current conditions and future scenarios after all activity is underground.
- On April 20 DDMI submitted its response to the Minister's report
- DDMI will complete the model in May
- DDMI will provide a new draft AQMP in June.
- DDMI is running the model now and there seems to be good agreement with the actual data. They had planned to provide a report to EC/GNWT last week but are still trouble-shooting.
 - Noted that it would have been good for EC/GNWT to receive the emissions inventory before running the model
 - Golder wanted to make sure the model was providing expected outputs before releasing it. DDMI can provide the original data and any changes
- EC requests inventory by next week
 - What are the inventory components? Lots of point sources.
 - DDMI had wanted to use actual Ekati inputs rather than making assumptions, but haven't received a response from Ekati. Noted that the Misery start-up may affect inputs at Diavik
- The incinerator will be built this summer. They needed warmer weather before pouring the slab.
 - Will there be stack testing? The incinerators will need to be monitored. Noted that DDMI's current incinerators would not meet EC guidelines but the new ones should.
- DDMI will be using the Calpuff model for its AQMP.

BREAK

Next meeting - June 28 - 30 in Behchoko.

Item 12 - Wildlife Act

Susan Fleck updated the board on the draft act.

- Act was introduced in March and is now at the Standing Committee
- The Standing Committee is expected to report in August
- IEMA has sent comments in to the Committee
- It will take at least a year from the time the act is passed until it comes into effect
 - GNWT will need to look at areas where regulations are needed.

- GNWT is planning to provide for public input on the regulations with stakeholders
- The regulations will mostly be proposed by the Minister to the Commissioner.
- The Standing Committee is not hearing much good about the bill, but the criticisms are largely on one small part
 - The habitat section is the most controversial
 - The Minister can create conservation areas
 - The Minister can create regulations to protect wildlife such as no activity within 100 m of a bear den
- Habitat effects from land use
 - Minister can develop guidelines to make industry aware of best management practices
- The Minister can request management and monitoring plans for a project
 - o Regulations could be developed under this section
 - WMPs could be required through the new act
 - o The Minister could adopt a plan from another organization eg. NEB
- Chamber of Mines says the provisions are duplicative. ENR disagrees.
- Territorial regulations would apply unless they conflict with a federal authorization.

Closing prayer - Lawrence Goulet

Motion: to adjourn Moved: Floyd Adlem

Carried

Meeting adjourned at 3:50