From: EMAB [Emab1@arcticdata.ca]  
Sent: Friday, November 25, 2005 3:09 PM  
To: bwooley@mvlwb.com  
Cc: Peter Lennie-Misgeld; Tony Pearse; colleen_roche@gov.nt.ca; geoffc@polarnet.ca; Anne Wilson; Bart Blais; Dave Balint; Dora Enzoee; Eric Yaxley; Jason McNeill; Kathleen Racher; Kelly Cott; Lorne Napier - Rae Edzo Metis Local; Monica Krieger; MVLWB Permit Email (MVLWB Permit); Nathan Richea; Rachel Crapeau; Sheryl Grieve; Stanley Anabik; Tim Byersees; Tli Cho Lands Protection Department; Stephen Ellis; Don MacDonald; Nam Lee; Morrison, John; Lawrence Goulet; Florence Catholique; Erik Madsen; Eddie Erasmus; Doug Crossley; David Livingstone; Tom Beauleiu; Gord MacDonald  

Subject: Re: DDMI Response - Nov 18 Comments - WL Renewal

Hi Bob,
On behalf of EMAB I'd like to acknowledge DDMI's prompt response to the comments on the water licence renewal application. EMAB also wishes to state our opinion that all the issues raised in the comments merit a full discussion among the parties, and that we encourage the MVLWB to include all the comments that fit within the intent of the technical sessions on the agenda.

Please contact EMAB if you require further clarification.
Sincerely
John McCullum for
Doug Crossley
Chair

----- Original Message -----  
From: Macdonald, Gord (DDMI)  
To: bwooley@mvlwb.com  
Cc: Peter Lennie-Misgeld; Tony Pearse; colleen_roche@gov.nt.ca; geoffc@polarnet.ca; Anne Wilson; Bart Blais; Dave Balint; Dora Enzoee; Eric Yaxley; Jason McNeill; John McCullum; Kathleen Racher; Kelly Cott; Lorne Napier - Rae Edzo Metis Local; Monica Krieger; MVLWB Permit Email (MVLWB Permit); Nathan Richea; Rachel Crapeau; Sheryl Grieve; Stanley Anabik; Tim Byersees; Tli Cho Lands Protection Department; Stephen Ellis; Don MacDonald; Nam Lee  
Sent: Thursday, November 24, 2005 2:14 PM  
Subject: DDMI Response - Nov 18 Comments - WL Renewal

Bob,

Please find attached DDMI's response to the November 18, 2005 recommended changes to the water license terms and conditions as per the MVLWB work plan. A paper copy will follow by mail.

Gord
Sharon Debler

From: Macdonald, Gord (DDMI) [Gordon.MacDonald@diavik.com]
Sent: Thursday, November 24, 2005 2:14 PM
To: bwooley@mvlb.com
Cc: Peter Lennie-Misgeld; Tony Pearse; colleen_roche@gov.nt.ca; geoffc@polarnet.ca; Anne Wilson; Bart Blais; Dave Balint; Dora Enzoe; Eric Yaxley; Jason McNeill; John McCullum; Kathleen Racher; Kelly Cott; Lorne Napier - Rae Edzo Metis Local; Monica Krieger; MVLBW Permit Email (MVLWB Permit); Nathan Richea; Rachel Crapeau; Sheryl Grieve; Stanley Anablak; Tim Byerses; Tli Cho Lands Protection Department; Stephen Ellis; Don MacDonald; Nam Lee

Subject: DDMI Response - Nov 18 Comments - WL Renewal

Bob,

Please find attached DDMI's response to the November 18, 2005 recommended changes to the water license terms and conditions as per the MVLWB work plan. A paper copy will follow by mail.

Gord

11/25/2005
November 24, 2005

Bob Wooley
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Ave.
P.O. Box 2130
Yellowknife, NT, X1A 2P6

Re: **DDMI Response – Water License Renewal Comments**

Diavik Diamond Mines Inc (DDMI) submitted its renewal application on August 8, 2005. The Mackenzie Valley Land and Water Board (MVLWB) deemed the application complete on September 7, 2005 and distributed the application for comments on September 9, 2005. MVLWB requested that reviewers comment include recommended changes to the terms and conditions of the water license. This was further emphasized in a letter of clarification issued November 1, 2005. The MVLWB extended the closing date for comments by 5 weeks to November 18, 2005.

MVLWB forwarded reviewer comments by email on November 21, 2005. MVLWB has not provided DDMI with any written direction regarding a response other than what is contained in the correspondence around the work plan. DDMI contacted MVLWB Staff to clarify that a response would be provided by DDMI to any recommended changes to terms or conditions, to facilitate further discussion at the technical sessions.

DDMI has received the following reviewer comments:

- Department of Fisheries and Oceans (DFO) – November 18, 2005
- Environmental Monitoring Advisory Board (EMAB) – November 18, 2005
- Environment Canada (EC) – November 21, 2005
- NWT Department of Environment and Natural Resources (ENR) – November 18, 2005
- Indian and Northern Affairs Canada (INAC) – October 14, 2005 and November 18, 2005
- Kitikmeot Inuit Association (KIA) – November 18, 2005
- Tlicho Government (Tlicho) – November 18, 2005

The following is a summary of each reviewer recommended change to a term or condition (italic) followed by DDMI’s response. In some cases general comments were submitted without a recommended change to a term or condition. Specific responses have not been prepared for these.
Part A: Scope and Definition

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part B: General Conditions

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part C: Conditions Applying to Construction

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part D: Conditions Applying to Water Use

Item 5

1. DFO recommends that management plans, specifically the water management plan, should be updated and submitted to MVLWB for approval. The current license requires annual updates to the Water Management Plan and that it must be "acceptable" to the Board. The last submitted revision was March 31, 2004. As stated in the 2004 Annual Water License Report, this version remained current for 2004.

Part E: Conditions Applying to Dewatering

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part F: Conditions Applying to Waste Management Plans

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part G: Conditions Applying to Water Retention Dikes

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

Part H: Conditions Applying to Waste Disposal and Waste Facilities

Item 7a

1. EMAB/KIA propose no changes to Part H and support the continuation of the process envisioned in the current license for ammonia. DDMI does not have a specific response to this suggestion and is open to further discussion.
2. **EC recommends that the values for ammonia should be assessed once the results of further investigations (Part H Item 26) are available.** These results were submitted to MVLWB on November 24, 2005 and so are presently available.

3. **EC recommends that nitrate should be added as a regulated parameter with “discharge criteria set at levels which are protective of the most sensitive species outside the 0.01km² assessment boundary”. EC suggest using the criteria from the Snap Lake license as a starting point but it should be evaluated in the context of the discharge plume study when this study is available.** DDMI requests that MVLWB and/or EC provide the referenced Snap Lake criteria and the technical basis for its establishment to all parties prior to the December 13, 2005 technical sessions. The discharge plume study report was submitted to MVLWB on November 24, 2005 and so is presently available.

**Part I: Conditions Applying to Modifications**

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

**Part J: Conditions Applying to Contingency Planning**

- Reviewers did not recommend any changes to terms or conditions in this part of the license.

**Part K: Conditions Applying to the Aquatic Effects Monitoring**

**Item 6**

1. **EMAB/KIA and EC have proposed that this clause be changed to require a) submission of a revised Aquatic Effects Monitoring Program within 1 year, and b) submission of a revised Aquatic Effects Monitoring Program (AEMP) every 3 years thereafter. EC adds that there should be an independent audit of the data collected to date. INAC also recommends a mechanism be included for systematic review of the AEMP every 3 years. DDMI does not believe that the proposed change is necessary. Item 12 e) and Item 12 f) require that DDMI evaluate the effectiveness of the AEMP and make recommendations for revising the AEMP annually. It is DDMI’s view that issues with the AEMP should be brought forward by all parties when they are identified and not wait for a 3 year review. This annual review and identification of issues has occurred on an annual basis to date and has resulted in revisions to the AEMP. DDMI has proposed revisions to the AEMP around improving QA/QC and data management and revised trigger values that are not base on baseline data. DDMI has also collected data, as requested by reviewers, to evaluate an alternate sediment sampling protocol. The Diavik Technical Committee (DTC) has reviewed the QA/QC and data management plan and is currently reviewing the revised trigger values. DDMI will provide the sediment quality data prior to the next DTC meeting. Once this review is complete DDMI intends to submit these changes to the MVLWB for approval.**

**Item 7**

1. **EMAB/KIA proposes adding a sub-clause to the AEMP description on how Traditional Knowledge will be collected and incorporated into the AEMP. DDMI currently collects**
information through its community-based monitoring programs. Two of the three programs are focused on aquatic effects. These programs are funded by DDMI, separate from the Environmental Agreement. While it is still early days in these programs, DDMI expects that over time, if effects on Lac de Gras are identified as a result of these programs, that they will be documented in the field reports for that year and discussed with both EMAB and DDMI.

2. EMAB/KIA proposes adding a sub-clause to the AEMP description on how collected data will be used to establish or confirm thresholds or early warning signs. Thresholds and early warning levels are identified in the current AEMP and revised levels were recently proposed at the November DTC Meeting.

Item 7(f)

1. EMAB/KIA proposes adding “evaluation criteria” to the description of approaches used to annually adjust the AEM program. DDMI does not have a specific response to this suggestion and is open to further discussion.

Item 7(g)

1. DFO states that it is necessary to require an adaptive management plan that incorporates definitive threshold values that trigger mitigative action to protect the environment. DDMI notes that this is specified in the license in Part H Item 7(g) with the approved approach described in the AEMP, specifically Figure 2-1.

Item 7(h)iii

1. EMAB/KIA proposes adding project-related effects to “structure, abundance and productivity” of phytoplankton, periphyton, zooplankton and benthic invertebrates. The approved AEMP includes sampling of phytoplankton biomass and taxonomy, zooplankton biomass and taxonomy and benthic invertebrate taxonomy. Zooplankton and phytoplankton taxonomic samples are archived for future use if necessary. It is unclear as to the intended purpose of the proposed changes.

Item 7(k)

1. ENR staff suggest that an Air Quality Monitoring Program be included in a renewed license to ensure that water is not adversely affected by airborne wastes and their deposition in water. The AEMP is intended to measure project-related aquatic effects, irrespective of the possible mine source, by monitoring specific component of the aquatic ecosystem. To assist in evaluating AEMP monitoring results, contaminant loads from specific sources are also measured, usually within the Surveillance Network Program. Contaminant loads associated with airborne deposition is already specifically addressed in the current license in Part K, Item 7(k) and is a specific component of the AEMP that was approved by the MVLWB and has been implemented. See also response to Item 12(o) regarding reporting deposition monitoring results.
Item 12

1. EMAB/KIA is proposing that “for approval” be added as a requirement of the Board. DDMI does not have a specific response to this suggestion and is open to further discussion.

Item 12(c)

1. EMAB/KIA proposes adding “scientifically defensible” and “discussion of the data including data collected as part of the snow quality survey” to the requirement for an interpretation of the AEMP results. EC also noted the need to integrate snow quality survey (air monitoring). DDMI does not support adding the term “scientifically defensible” as it may put too narrow a constraint on the interpretation of the AEMP results. DDMI has no response to the proposal to add the reference to snow quality in the license but accepts including the results of the snow quality survey in the annual AEM Report.

Part L: Conditions Applying to Abandonment and Restoration

1. EMAB/KIA and ENR propose adding a clause requiring submission of a revised Interim Abandonment and Restoration Plan within 1 year and then subsequently every three years. The current License, at Item 4, requires DDMI to annually review and modify the Plan as necessary to reflect changes in operations, technology and results from restoration research and other studies. It is DDMI’s view that the proposed additional clause conflicts with the existing clause and that the existing clause is more appropriate.

2. EMAB/KIA propose adding a clause defining when a Final Abandonment and Restoration Plan should be submitted and recommend a minimum of 24 months prior to closure. DDMI supports this proposal as the clause would be helpful, but suggest that the minimum should be 5 years prior to closure to allow sufficient time for review, revision and agreement.

Term of License

1. EMAB notes that a concern with the requested longer term for the license is that “if any issues or problems arise it may be very difficult to amend the license, or any of the plans and programs required by the license, until the next renewal.” EMAB goes on to recommend that MVILWB clearly identify the process for amending a license that can be initiated by stakeholders such as EMAB. DDMI’s request for a 15 year term is in part premised on the understanding that such a process does exit not only for license amendments but also for changes to plans or programs. DDMI supports this EMAB recommendation.

2. KIA state their view that the term of the license should be 7 years because a) there is uncertainty regarding the potential for underground mining and b) a renewal in seven years time would be a good opportunity to re-evaluate and finalize to the extent possible the Abandonment and Restoration Plan. DDMI’s underground mining studies are to determine the most appropriate underground mining technique. The “potential” for underground mining has already been determined and underground mining is included in the existing water license. Regarding the Final Abandonment and Restoration Plan, provided the EMAB/KIA recommended change in Part L #2 above (which DDMI
supports) is adopted, then the opportunity to re-evaluate and finalize the Abandonment and Restoration Plan would be provided at an appropriate time, irrespective of the term.

3. **ENR staff do not support the 15 year term proposed by DDMI because a) the renewal process allows stakeholders an invaluable opportunity to offer technical advice to MVLWB on issue related to interveners mandates, and b) the term should be consistent for all proponents and a 15 year term is unprecedented.** In DDMI’s view it is inappropriate that stakeholders wait 7 years to offer advice to MVLWB on these issues. The current license, as well as the mandate of the DTC, allows for, at a minimum, annual opportunities to offer technical advice. In DDMI’s view what should be consistent for all proponents is not the actual term but the maximum term (25 years) as defined in the NWT Waters Act and the criteria used to determine a license-specific term. While a 15 year term may well be unprecedented, the opportunity for stakeholders to offer ongoing advice to MVLWB regarding DDMI’s water license through the DTC and EMAB is similarly, we understand, unprecedented. It is DDMI’s understanding that today communities and other stakeholders have greater abilities and opportunities, than at any time in the past, to provide ongoing advice to MVLWB on issues related to a water license.

4. **The Tl’cho opposes DDMI’s request for a term to last to the end of mine life and believes that the maximum term should be 7 years because a) it is clear from looking back to when the license was issued that changes have occurred with this project, b) it is in the public interest to have a requirement for a full public hearing at least every 7 years to consider whether the proponent is in full compliance and, c) to consider if changes need to be made to the terms and conditions of the License.**

a) It is DDMI’s understanding that if there is sufficient change in a project that amendments to the terms or conditions of a license is necessary, then a full public hearing is required, irrespective of the license term. It has been acknowledged that some environmental aspects of the DDMI mining operation were different in practice than originally predicted (i.e. ammonia and phosphorus), but in these cases amendments were applied for and the opportunity for a full public hearing provided.

b) It is DDMI’s understanding that the consideration of compliance is an ongoing activity that is not dependent upon the term of the license.

c) DDMI’s request for a 15 year term is in part premised on the understanding that MVLWB has a process for considering changes to terms or conditions of a license irrespective of the term of the license.

**Surveillance Network Program**

1. **EC suggest that TDS and hardness be added to the “Major ions” category and be reported in the monthly reports.** DDMI supports this suggestion.

2. **EC suggest that the sampling frequency for sediments at 1645-19 should be revisited as an annual frequency may be sufficient.** DDMI does not have a specific response to this suggestion and is open to further discussion.

Thank you for the opportunity to respond to these recommendations. I will be available to participate in the technical sessions during the week of December 13, 2005.
Diavik Diamond Mines Inc.

Regards,

[Signature]

Gord Macdonald

cc  MVLWB Email Distribution – Parties in the Proceedings