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November 25, 2011

Mark Cliffe-Phillips
Executive Director
Wek'eezhii Land and Water Board
#1-4905 48th Street
Yellowknife, NT X1A 3S3

Dear Mr. Cliffe-Phillips,

Re: **Response to Wek'eezhii Land and Water Board Request for Information to AANDC – DDMI Security Review**

On November 14, 2011, the Wek'eezhii Land and Water Board (WLWB) requested that Aboriginal Affairs and Northern Development Canada (AANDC) provide additional information to assist the Board in resolving the differences in security estimated by AANDC and Diavik Diamond Mines Incorporated (DDMI). The WLWB correctly noted that the difference between the AANDC and DDMI estimates is \$41,517,205 (for the total land and water liability).

AANDC has prepared responses to the WLWB requests in consultation with Brodie Consulting Limited (BCL). Response to each request is provided below. It should be noted that this response only includes a review of information provided on or before October 28, 2011.

1. Discuss how the information provided in DDMI's October 28, 2011 impacts AANDC's assumptions regarding the security estimate. If any of AANDC's assumptions change as a result of this information, provide an updated security estimate.

AANDC respectfully submits that the information provided by DDMI on October 28, 2011 has not impacted AANDC's or BCL's assumptions regarding the security estimate. AANDC's reclamation estimate and supporting rationale, as previously provided, stands.

AANDC would like to re-iterate that should additional information be provided, as requested within our October 24, 2011 submission, AANDC would modify its RECLAIM cost estimate in short order. AANDC specifically recommended:

“that an adequate level of validation to this issue would be a study (pre-feasibility level or higher), signed off by a registered professional (P.Eng/P.Geo).

The study should address concerns that:

- a. There is a specified quantity of Type I resource*
- b. There is a practical mining method for its recovery*
- c. The residual NCRP is reclaimable consistent with ICRP (till and waste rock cover over Type II and III material)*

Components of this study would include:

- i. Plan view drawings at each year end since the start of operations.*
- ii. Spot records of waste dump truck management*
- iii. Spot geochemical sampling*
- iv. Mining plan which addresses slope angles, access ramps, and appropriate mining equipment for:*
 - 1. the geometries involved*
 - 2. range of rock size,*
 - 3. cohesion (ice) and,*
 - 4. mining rate.*
- v. QA/QC plan.”*

- 2. Confirm that in 2007, BCL assumed that all Type I rock required for closure and reclamation would come from the waste rock pile and that there would be enough Type I rock even if DDMI were not to mine the A21 pipe.**

Based upon a cursory review of the Waste Rock Management Plan (WRMP), BCL assumed in its 2007 estimate that all Type I rock required for closure and reclamation would come from the waste rock pile.

- 3. Explain why AANDC now believes that a quarry is necessary to obtain rock for closure when this cost was not included in the 2007 estimate. For example, are there known changes to operations that necessitate the need for a quarry? Is there evidence that the waste rock segregation methods employed in 2007 were more reliable than they are now?**

Waste rock segregation methods have changed since 2007. The main change in waste rock segregation since 2007 is related to the methods utilized for the classification of rock. In previous versions of the Waste Rock Management Plan rock was classified using sulphur assays alone. In 2009, DDMI was approved to utilize either visual or sulphur assay methods, although criteria were not defined

as to when a specific method would be undertaken. Although AANDC acknowledges that DDMI proposed a conservative approach to classify waste rock when visual methods were to be used, it must also be acknowledged that misclassifications of material will occur more frequently (Type I misclassified as Type III and vice versa). AANDC identified this within its comments on Version 4 of the WRMP (2009):

“The highest percentage of misclassifications occurred with samples logged as Type III but assayed as Type I. Although this may lead to a “conservative” assessment, in essence it means that less and less Type I rock will be available and or stockpiled for ongoing construction, progressive reclamation and future closure of the mine. Type I rock will become more and more valuable as time passes and closure activities increase. Additionally, it means that some Type III rock will be inadvertently placed on the edges of the waste rock pile; something that is to be avoided according to the previously approved Waste Rock Management Plan.”

As defined within the version 4.2 of the WRMP, it is expected that approximately 5.4 MT of Type I rock will be misclassified as Type III within the A418 pit alone (Table B-4, Appendix B - Waste Rock Management Plan v.4.2) and will be unavailable for closure purposes (i.e. cover material).

The preceding discussion is of importance to the amount and availability of Type I rock for closure purposes at the Diavik mine site, and builds upon the concerns raised within the April and October 2011 AANDC RECLAIM cost estimates.

AANDC will not reiterate its full rationale as provided within those submissions, and refers the Board back to those submissions in its decision-making process. However, it is important to note that AANDC's concern was initially raised based upon DDMI's own identification of such a shortfall within Version 3.0 of its closure plan. In that document, DDMI requested departures from its approved cover designs (2001), which included a cover of Type I rock and till over the entire NCRP and PKC. In simple terms, the proposed departures would require a lower quantity of Type I rock and till for cover purposes.

DDMI justified their proposed changes to the cover design for the NCRP by stating:

“Closure plans for the waste rock pile have changed since the ICRP was approved in 2001. In 2001 the plan included a till cover to reduce infiltration, covered by a layer of low sulphur waste rock. Both materials were to be hauled directly from a planned A21 open pit. The A21 open pit

is no longer within the current mine plan, resulting in a change to the waste rock closure plans in this ICRP.”

It is clear within this statement that DDMI proposed departures within its cover design of the NCRP due to a lack of Type I material from the A21 development. It is clear that the A21 development is not within the current mine plan. It is not clear why DDMI proposed and rationalized the need to modify its cover designs based solely on the absence of Type I rock from the A21 development, if sufficient material (of appropriate geochemistry and size) was readily available and recoverable either within the NCRP or from other areas throughout the mine site.

Further to this, based upon a schematic provided to the Department by DDMI in December of 2010, AANDC had made an assumption that the entire NCRP is a blend of Type II and III rock. In its October 13, 2011 letter, DDMI apologized for any confusion and provided a schematic upon which it requested the Department utilize moving forward.

Such discrepancies and confusion only raises the Department's concern with respect to the whether or not there is sufficient quantity of Type I material within the Waste Rock Pile and whether that material is readily available and recoverable for closure purposes. The information recommended by AANDC to resolve this issue is provided in the response to question 1.

AANDC notes that should the Board decide further information is not required to resolve this issue, the AANDC estimate will have to be revisited to ensure costs associated with recovering and collecting material from within the NCRP for cover purposes are adequate.

4. In 2011 and 2007, AANDC included 5.46 million dollars to bring fuel to the site for closure. In 1999, it appears that the security estimate did not include the cost of bringing fuel to the site. Please confirm this, and explain why the assumption regarding fuel changed after 1999.

In 1999, an allocation for bringing fuel to site was not included. It is unclear as to why this allocation was not included.

Further direction on considerations for calculating reclamation security was provided in 2002, when the Department released its *Mine Site Reclamation Policy for the Northwest Territories*. The policy outlined principles to be used when assessing and preparing RECLAIM costs estimates. An important principle which relevant to this specific question is:

Adequate security should be provided to ensure the cost of reclamation, including shutdown, closure and post-closure, is born by the operator of the mine rather than the Crown.

This principle, along with the experience AANDC has gained through its Contaminants and Remediation Directorate, has resulted in improvements in Departmental practice when calculating reclamation security for industrial projects. The Crown cannot assume that equipment or fuel would be left onsite, nor can it be assumed that if it is left onsite that it would be suitable for use. It is assumed that a mine nearing receivership will take cost reduction/recovery steps to alleviate losses. Usable equipment and fuel may be sold to adjacent operations. AANDC also notes that at several sites where clean-up activities have been initiated or undertaken by the Department, little to no usable fuel was available onsite.

In an effort to ensure that no costs are born by the Crown, AANDC now applies costs associated with mobilization of fuel in all its RECLAIM cost estimates. A commitment by the proponent that a minimum amount of fuel will remain in their on-site storage is simply not adequate to ensure that the Crown will not incur costs in this regard.

Concluding Remarks:

AANDC trusts the above information will be useful to the Board in making a decision on this matter. The Department maintains that should uncertainty or lack of clarity be evident, that a precautionary approach must be utilized in the establishment of reclamation security, to avoid undue cost to the Crown. AANDC is confident that the Board will remain diligent in exercising its legislative authority for the setting of reclamation security.

If you have any questions feel free to contact Mr. Robert Jenkins at (867) 669-2574 Robert.Jenkins@inac.gc.ca or the undersigned at (867) 669-2647 or Teresa.Joudrie@inac.gc.ca

Sincerely,



Teresa Joudrie
Director – Renewable Resources and Environment

Sharon

From: Ryan Fequet [rfequet@wlwb.ca]
Sent: Saturday, November 26, 2011 10:42 AM
To: 'Brett Wheler'; 'Bruce Hanna'; 'Charlene Coe'; 'Chris Heron'; 'Colleen English'; 'Doug Crossley'; 'Environment Canada'; 'Erika Nyssonen'; 'Gavin More'; 'Geoff Clarke'; 'GNWT'; 'Gord Macdonald'; 'Iris Catholique'; 'Jason Brennan'; 'John Donihee'; 'Joline Huskey'; 'Julian Kanigan'; 'Karin Clark'; 'Kathleen Racher'; 'Kerri Garner'; 'Lisa Lowman'; 'Luigi Torretti'; 'Malcolm Robb'; 'Mark Cliffe-Phillips'; 'Mark Fenwick'; 'Nathen Richea'; 'Neil Hutchinson'; 'Patty Ewaschuk'; 'Ray Griffith'; 'Registry'; 'Rosy Bjornson'; 'Ryan Fequet'; 'Sarah Elsasser'; 'Sarah-Lacey McMillan'; 'Scott Stewart'; 'Sheryl Grieve'; 'Sonya Almond'; 'Stanley Anablak'; 'Stephen Bourn'; 'Stephen Ellis'; 'Tim Byers'; 'Todd Slack'; 'Tom Unka'; 'Tony Pearse'; 'Tracey Covey'; 'Velma Sterenberg'; 'YKDFN'
Subject: W2007L2-0003 - Diavik - Security Review - AANDC & DDMI Documents
Attachments: W2007L2-0003 - Diavik - Security Review - DDMI Submission in Response to WLWB Information Request - Nov 25_11.PDF; W2007L2-0003 - Diavik - Security Review - AANDC Submission in Response to WLWB Information Request - Nov 25_11.PDF; W2007L2-0003 - Diavik - Security Review - DDMI Clarification in Response AANDC Submission - Nov 26_11.pdf

Morning All,

Please find attached the following documents regarding the review of the security liability at the Diavik site that was formally initiated by the Wek'èezhii Land and Water Board on October 13, 2011:

1. Diavik's November 25, 2011 submission in response to the WLWB information request sent on November 15, 2011;
2. AANDC's November 25, 2011 submission in response to the WLWB information request sent on November 15, 2011;
3. Diavik's November 26, 2011 submission of clarification in response to AANDC's November 25, 2011 submission.

These documents will be posted on our online registry shortly and if you have any questions please feel free to contact WLWB, AANDC or Diavik staff.

Cheers,

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