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Nunavut Kavamat, Atanita Uvalu Kavamalikinikut Munakhijuthavakviat Government of Nunavut, Department of Executive & Intergovernmental Affairs Gouvernement du Nunavut, Ministère de L'Exécutif et des Affaires Intergouvernementales

July 19, 2006

Karlette Tunaley Technical Adviser Nunavut Impact Review Board P.O Box 1360 Cambridge Bay Nunavut X0B 0C0

RE: Answers to Meadowbank Written Hearing: NIRB's Final Questions to Parties and Cumberland Resources Ltd. July 17 2006

Dear Ms Tunaley

As requested by NIRB in the letter dated July 17, 2006, the Government of Nunavut (GN) is happy to provide a response to the specific questions directed to us for the continuance of the Meadowbank final hearing; these responses are as follows:

Answer to Question #8

details of Cumberland's socio-economic monitoring plan (including defining issues, indicators, methodologies for data collection and analysis, roles and responsibilities, schedules and budgets) before construction of the project begins?

The GN has contacted Cumberland Resources Ltd. and discussed the possibility of developing the details of the socio-economic monitoring plan before construction of the project begins. The Government of Nunavut, with other interested parties, will work to put in place a regional monitoring and mitigation committee to support Cumberland in the development of the socio-economic monitoring plan.

While it is not possible to respond with certainty to this question when the date for construction startup is unknown, given the amount of work on socioeconomic monitoring already undertaken by the government (and the proponent) to date, and the progress made in the development of a socio-economic monitoring regime in the Kitikmeot

region, it should be possible to develop the details of the plan in a two to three month period.

Given Cumberland's willingness to work with the government on the regional monitoring and mitigation committee, and their commitment to work on the development of the details of a socioeconomic monitoring plan, if NIRB chooses to issue a project certificate it can be confident that these objectives will be attained, and that socioeconomic monitoring will take place from the project's beginnings.

Answer to Question #9

a. ...to what extent and to what level of certainty will Cumberland be able to establish the range of natural variability in its March 2007 summary report?

Cumberland has been collecting baseline information of wildlife distribution for several years, beginning in 1999, and then again consistently from 2002 to present. Those seven years of baseline data, combined with documented knowledge of regional arctic ecology provides the most suitable data available within the region of interest. The seven years of inventory and monitoring has provided us with general knowledge of the variability of distribution and behaviour of wildlife within the region. Data collected within the regional study area, and specifically for caribou in combination with supplemental site-specific caribou location data (the proposed collaring program) should provide further documented evidence of the potential effects (or lack of) of mine-related disturbances.

The 2007 Summary Report will provide specific data analyses comparing natural (before impact) to mine-related (after impact) disturbances, and there are a few examples of how these analyses have been conducted (e.g., Boulanger et al 2004, Johnson et al 2005). We are assured that Cumberland has retained the services of a qualified biostatistician (John Boulanger) who has conducted identical analyses using very similar data sets (e.g., Boulanger et al 2004). In Cumberland's written response (Cumberland Resources response to the NIRB's April 24th 2006 letter) a number of analyses are identified that will be used to determine natural variability form minerelated variability. Further to this, Mr. Boulanger's services have also been retained by the GN Department of Environment (GN-DOE) to conduct similar region-wide analysis of caribou distribution based on regional monitoring efforts (unrelated to FEIS). The combined data available to Mr. Boulanger will provide Cumberland and the GN with the best available data with which to conduct analyses in determining population-level effects of mine-related disturbances on local caribou populations.

The March 2007 summary report will focus on rigorous statistical methods and detailed analyses to determine wildlife distribution and abundance and how those factors may be affected by mine site activities. The GN-DOE is confident that Cumberland has the best available data upon which to conduct those analyses and that they have retained the services of qualified personnel to assist in those analyses.

b. ...what effect would any inadequacy in these data have on the quality of impact predictions monitoring?

Inadequate data will result in poor quality impact predictions and an inability to distinguish between natural variation and mine impacts. However, it is the position of the GN-DOE that Cumberland Resources is using the best available data and best available resources (i.e., a qualified biostatisitician) to assist in the analyses.

Answer to Question #10

 a. ...to what extent will Cumberland be able to distinguish cow/calf caribou groups from other groups in its March 2007 Wildlife Monitoring Summary report

Although we have not seen the data, the GN-DOE has been assured by Cumberland that caribou cow/calf group data is available from previous survey data and that further analyses will distinguish cow-calf groups from other caribou groups. If that data can be separated, and further surveys distinguish cow-calf groups from other groups, the data should be adequate for determining site-specific effects on caribou cow-calf groups.

b. ... and what effect would any inadequacy in this data collection have on follow-up monitoring?

Inadequate baseline data will reduce the potential for a before-after-control-impact (BACI) analyses. Should the baseline prove inadequate, an alternative of comparing near-site (mine site) distribution to far-site (away from any mine-related disturbances) should be possible. The GN-DOE is confident that suitable data is available and that appropriate analyses can be conducted.

Literature Cited

Boulanger, J., K. Poole, B. Fournier, J. Wierzchowski, T. Gaines, and A. Gunn. 2004. Assessment of Bathurst caribou movements and distribution in the Slave geological province. GNWT Manuscript Report no. 158. 120 pp.

Johnson, C.J., M.S. Boyce, R.L. Case, H.D. Cluff, R.J. Gau, A. Gunn, and R. Mulders. 2005. Cumulative effects of human developments on arctic wildlife. Wildlife Monographs no. 160. June 2005. 37 pp.

The GN thanks NIRB for giving us this opportunity to comment.

Yours truly,

Original signed by

Phoebe Hainnu Assistant Deputy Minister