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BY FAX (867 983-2594) and e-Mail

Ms. Karlette Tunaley Technical Advisor Nunavut Impact Review Board P.O. Box 2379 Cambridge Bay, Nunavut X0B 0C0

Dear Ms. Tunaley:

RE: Cumberland Resources Ltd. Closing Remarks in Nunavut Impact Review Board Meadowbank Proceeding

Cumberland Resources Ltd. (Cumberland) is pleased to submit its closing remarks in respect of the issues raised by the Nunavut Impact Review Board (NIRB) on April 24th, 2006 subsequent to the end of the public hearings held in Baker Lake, Chesterfield Inlet and Rankin Inlet from the 27th to the 31st of March 2006.

The NIRB review of the proposed Meadowbank project has been exhaustive. The NIRB review process has provided important opportunities which have ensured the involvement of the communities, the public and the parties and regulators which intervened in the Meadowbank proceeding. The process established by the Board to address the matters raised in its April 24th letter of decision has been no less thorough.

Cumberland relies on and will not repeat the general argument set out in its closing, made in Rankin Inlet on March 31, 2006. As instructed by NIRB, our remarks below address only the five (5) points set out by the Board in its letter of July 12, 2006.

Cumberland responded in detail to NIRB's April 24th letter of instruction. We filed a comprehensive submission on all matters raised in that letter and subsequently responded in detail to reviewers' comments. We also provided responses to the additional questions set out by the Board on July 17th. We have also, as instructed submitted an updated list of Cumberland commitments.

It is Cumberland's respectful submission that all of the matters raised by the Board on April 24th and subsequently by both the Board and reviewers have been thoroughly addressed. The impact predictions, mitigation and monitoring plans associated with the all weather road, socio-economic impacts and effects on Chesterfield Inlet have been refined and improved.

No significant impacts are likely to result from the activities associated with the road or barging activity. Cumberland's commitments to monitoring and to adaptive management of any concerns that do arise during project construction, operation and decommissioning will ensure that the environment of Nunavut is protected throughout the life cycle of the Meadowbank project.

Cumberland has worked with all parties since April 24th to ensure that our response to NIRB's concerns also satisfied the needs of regulators and interested parties. Our review of the closing comments submitted by the parties to the Board on July 21st indicates that these efforts have been largely successful.

Because the environmental impact assessment process in Nunavut is integrated with the regulatory process, these activities operate as part of a continuum. Once the NIRB process is completed, and assuming the Board recommends approval of the Meadowbank project to the Minister of Indian and Northern Affairs Canada (INAC), the environmental protection process will continue. Specific regulatory instruments, licences and authorizations will be developed. NIRB through its monitoring process and the regulators, including the Nunavut Water Board will ensure that further detailed protection of the environment takes place.

Consequently, we suggest that the question which must be asked at this stage is whether Cumberland has satisfied its burden of proof and convinced NIRB that no significant impacts will result in respect of those matters raised April 24th and thereafter.

We urge the Board to consider all of Cumberland's submissions made since April 24th in answering this question. We also ask the Board to give weight to the submissions made by the parties which have participated in the post April 24th process. Cumberland also urges the Board to consider the specific submissions and the closing remarks made by these parties. We acknowledge the recommendations they have made to the Board with respect to terms and conditions for inclusion in a project certificate. We feel nevertheless that it is still fair to summarize the results of the post April 24th process by observing that all parties to the proceeding have indicated that they would consider a NIRB decision in favour of the Meadowbank project which allows the project to move on to the regulatory phase to be an acceptable outcome.

Our specific comments in respect of the five (5) points set out in the NIRB July 12th letter are set out below:

1. The All Weather Road:

The land owners (KIA and Canada) and the Hamlet of Baker Lake whose residents could be affected by the road are satisfied with the proposed approach to operation of the road and with Cumberland's proposed measures to mitigate any impacts associated with the road. Cumberland has set out a comprehensive response to the issues raised by NIRB on April 24th about the road.

Parties which would participate in the monitoring of the effects of the road are also satisfied with the monitoring program proposed by Cumberland. We suggest that the issues identified by NIRB on April 24th have been satisfactorily addressed.

2. Socio-Economic Impacts:

The parties which would participate in project specific and regional monitoring of the socio-economic effects of the Meadowbank project have indicated their satisfaction with the monitoring framework proposed for the project and made commitments to early initiation of work on a monitoring framework. Cumberland has responded comprehensively to the issues raised in the NIRB April 24th letter. We suggest that the issues identified by NIRB on April 24th have been satisfactorily addressed.

3. Consultation with Chesterfield Inlet Residents:

Cumberland has conducted consultation with Chesterfield Inlet residents. We have expanded and clarified our commitments to work with the community and to provide for community involvement in monitoring of barge traffic. Cumberland recognizes that it will have to continue to work with Chesterfield Inlet and has committed to do so.

4. The "Temporary Explosives Factory" or Mix-Truck:

Cumberland has answered all of NIRB's questions in respect of the possible use of a Mix-Truck during the construction of the all weather road and at the mine site. The use of explosives and their effects were discussed in the FEIS and during the hearing. The need for explosives for the construction and operation of the mine has been clear for some time and any impacts associated with such use have been assessed.

The Mix-Truck would have to be licensed by Natural Resources Canada. Use of such equipment would simply enhance safety and convenience in the blasting process. Use of a Mix-Truck would not change any of the predicted impacts of the blasting process which have already been considered in the Meadowbank proceeding.

Cumberland has as yet taken no steps to procure this equipment. If a decision to use a Mix-Truck is made, the vehicle will have to be moved in to Baker Lake. Cumberland has not yet applied for a licence for the use of such equipment. Consideration of the use of a Mix-Truck is still at the planning stage.

5. List of Commitments:

The Board has Cumberland's updated list of commitments. It is comprehensive of commitments made before the end of the hearing and since. As indicated by Cumberland in the hearing, we have no objection to a term in the project certificate which requires implementation of the commitments.

Further to NIRB's comments on the commitment list, we provide the following clarifications. Cumberland reaffirms our acceptance to carry out commitments made to:

- 1. GN regarding sampling at Baker Lake marshalling facility (29Mar06 line 00529-12).
- 2. GN deputy minister regarding the GN's three conditions for the AWR (CRL letter to me dated July 11, 2006 regarding Comments on Cumberland's Submission regarding Meadowbank Gold Project and the proposed Temporary Explosives Magazine).

- 3. GN regarding details of the hunter harvest study, collection of information to delineate populations of VEC potentially affected by increased harvest levels along the AWR, details of survey methods (CRL letter to me dated July 11, 2006 regarding Comments on Cumberland's Submission regarding Meadowbank Gold Project and the proposed Temporary Explosives Magazine).
- 4. NRCan regarding the waste cover design and progressive sampling to help increase predictability of the final performance of the UM cover material in controlling ARD and ML (30Mar06 line 00932).
- INAC regarding in pit disposal of waste and identification of a landfill area and a list of identified materials that would be placed in pits, landfill and waste rockpiles (31Mar06 around line 01030).
- 6. Timing of commitments added to commitment list included with this letter.
- 7. NRCan regarding use of emulsion blend explosives.
- 8. If any commitments are missing and are brought to our attention at any time in the future, Cumberland will certainly honour those commitments.
- 9. INAC regarding clarification of road as described in INAC's closing letter.
- 10. HC regarding further studies and monitoring of potential country food contamination as described in HC closing letter.

CONCLUSION

Cumberland respectfully submits that the matters raised by the Board on April 24th have been addressed and that no significant environmental or socio-economic impacts will result from the activities associated with the road or barging as long as the mitigation measures outlined are implemented and we have committed on the record to do so. Cumberland has also committed to a comprehensive monitoring process and to an adaptive management process which will address and mitigate any unpredicted impacts which may arise.

In closing, it is our submission that Cumberland has met its burden and that the Meadowbank project proposal is ready to move on to the regulatory phase. We request that NIRB make such a ruling.

We urge the Board to close the record and make and forward a decision in favour of the Meadowbank project to the Minister of INAC.

Yours truly,

CUMBERLAND RESOURCES LTD.

Craig Goodings

Manager, Environmental and Regulatory Affairs

Commitments

Commit to re-run model for a sensitivity analysis on total dissolved solids concentration in pit waters – **Construction.**

Commit to resample groundwater monitoring wells in summer 2006 – **Underway**.

Commit to considering capping Vault pile with fine grain material and/or establish corridors for wildlife – **Operations / Closure**.

Commit to identifying mitigation measures <u>if</u> groundwater contamination (tailings) has occurred during operation. Include what triggers would be used in this evaluation – **Operations.**

Commit to assessing permeability of fault upon drawdown of North arm of Second Portage Lake and commit to establishing trigger levels and mitigation strategies – **Construction / Operations**.

Compile a technical memo that addresses "Accidents and Malfunctions" resulting from catastrophic events - **Draft Submitted.**

Monitor the accuracy of predictions of the impact of road on wolverine and bears – **Operations.**

Adaptive road management plan that considers the all wildlife mortality incidents – **Construction / Operations.**

Include in next Wildlife Monitoring summary report (March 2007) - Construction:

- Review and evaluation of size of RSA
- Report of the natural variability of VECs
- Detailed analysis of distribution and abundance of cows, bulls and calves to distinguish between potentially different groups of caribou.

Issue a revised TEMP document which will provide more detailed information on the following – Fall / Winter 2006:

- Study used determine effects on ungulate populations from the increased human access caused by the all-weather road
- Collaring study and cooperative agreement between DOE, CRL and other studies proposed
- Investigative tools used to conduct monitoring surveys prior to construction

Provide details on statistical approach and validation to support conclusions drawn from monitoring impacts on wildlife – **Fall / Winter 2006.**

Participate in socio-economic monitoring programs that will be developed in collaboratively by the RMMC – **Underway / Ongoing**.

Develop a wellness monitoring plan for Baker Lake and other communities that might be impacted by the project. The geographic scope of wellness monitoring to be defined at that time – **Construction / Operations**.

Work with INAC and other interested parties to develop details of all-weather road management plan – **During Lease Application – KIA/GN/INAC**.

Update of Access and Air Traffic Management Plan to incorporate adaptive management practices – **Construction / Operations**.

Effectively communicate to community of Baker Lake the private nature of the road and inform residents of CRL road-use restrictions - **Construction**.

Effectively communicate CRL road-use policy to community of Baker Lake – **Construction**.

Observe, collect and maintain information on road-use to facilitate monitoring of the non-project uses of the road – **Operations.**

Consult with stakeholders and update its reclamation and closure plan with the final design for decommissioning once this information becomes available – **Operations.**

Should CRL maintain or operation the road beyond the current proposal, INAC suggests a subsequent environmental assessment may be required – **Closure**.

Track the community of origin of hired Nunavimmiut to direct monitoring and follow-up activities – **Operations.**

Consider adaptive monitoring and mitigation measures for communities other than Baker Lake should these be substantially affected by the Project – **Operations.**

Data collected during normal mine operation will be gathered and reported in a form that is compatible with socio-economic project monitoring – **Operations.**

Submit complete Spill Contingency Plan to EC for review, once available. This plan will address the concerns of the residents of Chesterfield inlet – **Once Shipper Hired**.

Follow DFO recommendations on the design of water course crossings to minimize impacts to fish and fish habitat (March 10, 2006 letter from DFO) – **Detailed Engineering.**

Engage local HTO in the development, implementation and reporting of creel surveys within water bodies affected by the project – **Operations**.

Provide clarification on what vessels will marine mammal monitors be allowed to board – **Completed.**

Notify Navigable Waters Protection Program to assess the navigability of additional water crossings, if any, along the all-weather route – **Detailed Engineering.**

Engage in discussions with representatives of the Canadian Coast Guard to reassess where response and spill kits are presently located within Nunavut, and not put the onus on TC for placing community spill kits in the Hamlets of Chesterfield Inlet and Baker Lake - **Operations**.

Identification of the proper Transport Canada branches and other federal government departmental responsibilities will be specified where appropriate – **Operations.**

Monitoring of caribou within the study area be completed on a monthly basis once all-weather road is completed – **Operations.**

Notify the Department of Land and Resources of any changes in the proposed project – **Detailed Engineering / Construction**.

Only a Transport Canada Certified Shipper will be hired to carry Cumberland's supplies – **Construction / Operations.**

The shipping company will have spill equipment on board with crew trained to deploy the equipment – **Construction.**

The Coast Guard will be notified as soon as a spill has occurred and, if required, will provide further spill support – **Construction / Operations.**

Once the shipping company is hired, the shipper and Cumberland will return to Chesterfield Inlet for a one-day workshop to more fully discuss the successful companies' procedures, type of ships, spill equipment, etc. – **Construction.**

Cumberland will place a local monitor from Chesterfield Inlet on ships carrying fuel for the Meadowbank project – **Construction / Operations.**

Cumberland will request that the shipping company contracted to carry fuel for the project carry out practice drills deploying their spill equipment in various locations within the inlet – **Construction / Operations**.

In addition to the initial TK information currently being gathered by Andrea Tautu of the HTO on cabins and hunting areas, Cumberland will conduct a one-day workshop to more fully gather TK relating to local activities in the inlet – **Construction**.

In addition to the local monitor, captains will follow the following mitigation procedures in the event that marine mammals are in the vicinity of the shipping activities — **Construction / Operations**:

- i) Wildlife will be given right of way.
- ii) Ships will maintain a straight course, constant speed, and will avoid erratic behaviour.
- iii) When marine mammals appear to be trapped or disturbed by barge/ship movements, the barge/ship will stop until the mammals have moved away from the area.

Cumberland and the Shipper will carry shipping insurance – **Construction / Operations.**

Cumberland will conduct annual community consultation visits in Chesterfield to report on the project and related shipping activities and to hear any concerns/comments from Chesterfield Inlet residents - **Operations**.

Re-do WQ modeling with less conservative assumptions: no rock wetting factors, no permafrost, use 1-kg IV rather than 100-kg IV rates for poor-end; used 100-kg for best estimate; higher temperature of soil to air by 4.4°C; long-term WQ w global warming; minimal improvement to WQ from UM cover (not automatic transition) – **Detailed Engineering / Operations.**

Additional Field and lab analysis of WR to segregated PAG and non-PAG rock – **Operations.**

Diffuser design and impact of effluent on receiving environments - Detailed Engineering.

Adaptive management of (placement of) mine waste material considering monitoring results obtained during operation – **Operations.**

Confirmatory sampling of Road alignment rock and pre-approval of ARD criteria – **Detailed Egnineering.**

Detailed plans for water treatment – **Operations.**

Evaluation of viability of proposed in-situ and active treatment system and subsequent effects of effluent to receiving environment (near and far-field) – **Operations.**

Re-evaluate model using 2003 and 2004 groundwater data – **Detailed Engineering.**

Replace defective wells and conduct 3 to 4 semi-annual groundwater monitoring rounds – **Underway.**

After 1 year of additional data collection (in 2007) re-evaluate water quality (model) to compare to actual performance once mine start up - **Construction**.

- 1.1 Reconsider ARD screening criteria and include regulators in approval of ratios/guidelines as warranted **Detailed Engineering.**
- 1.2 Long-term chemical stability (metal leaching) of UM rock **Operations.**
- 1.4 revise water balance and water quality predictions. Measures to monitor and confirm predictions, trigger for mitigation **Detailed Engineering.**
- 1.5 operational criteria for waste management and use of WR **Operations.**
- 1.6 provide/develop summary of treatment needs **Detailed Engineering.**
- 1.7 effluent plume delineation (near-field) modeling and revised WQ predictions **Detailed Engineering.**
- 1.9 Monitoring of all-weather road rock quality, ARD/ML potential **Operations.**
- 1.10 Continued geochemical characterization (laboratory and filed tests) of UM, PAG and uncertain PAG rock and input into adaptive waste management plan **Operations / Closure.**

Lake bed sediment samples to be collected and analyzed for geotechnical properties – **Detailed Engineering.**

Review tailings and waste management alternatives including climate change, conduct gap analysis to determine deficiencies required for engineering and construction of dikes – **Detailed Engineering**.

Consolidate Tailings management alternatives assessment into one document – **Detailed Engineering / Construction.**

Perform a technical review of dewatering dikes – **Detailed Engineering.**

Carry out coupled seepage-thermal and solute transport modeling including Second Portage lake fault zone – **Detailed Engineering / Construction.**

Revise the No Net Loss plan to address specific requirements related to the scheduling the northwest arm of Second Portage Lake as a Tailings Impoundment Area – **Detailed Engineering / Construction.**

Investigate additional "A" and "B" list compensation options during summer 2006 – **Detailed Engineering / Construction.**

Incorporate hydrology information at fish bearing stream crossings into detailed design of bridges and culverts along the all-weather road – **Detailed Engineering.**

Provide detailed engineering of water intake pipe to avoid fish habitat disturbance along the shoreline – **Detailed Engineering.**

Prepare and implement Incinerator Waste Management Plan – Construction / Operations.

Develop Energy Conservation Plan – **Construction / Operations.**

Incorporate the Government of Nunavut Dust Suppression Guidelines issued under the Environmental Protection Act to Cumberland Air Quality Management Plan – **Construction / Operations / Closure**.

Conduct annual incinerator stack emission monitoring for mercury, dioxins and furans and report results to Environment Canada and Government of Nunavut – **Construction / Operations.**

Provide annual report of the quantity and type of waste generated at the mine site distinguishing landfilled, recycled and incinerated streams – **Construction / Operations**.

Reassess the selection of incinerators and justify the decision in regards to best available economically feasible technologies (BAEFT) – **Detailed Engineering / Construction.**

Provide a list of all personnel trained to operate the incinerator - Construction / Operations.

Install and operate two particulate samplers at the project site and report annually monitoring results conforming to detailed reporting protocol – **Construction / Operations.**

Perform sound level monitoring twice a year and document results – **Construction / Operations.**

Justification for existing RSA – Fall / Early Winter.

Elaboration of threshold mortality levels of "1" for Grizzly Bear, Wolverine, Caribou and Muskox, and commitment to report any mortalities of the above species immediately and enact adaptive mitigation measures immediately – **Fall / Winter 2006.**

Details of hunter harvest study – Fall / Winter 2006.

Discussion of aircraft over-flight height limits (610 m for point to point; 1000m vertical and 1500m horizontal for concentrations) and proposed efforts to monitor impacts of air traffic at mine site on wildlife – **Detailed Engineering.**

Methodology of all monitoring programs including satellite-collaring – Fall / Winter 2006.

Description of statistical approach, power and capability - Fall / Winter 2006.

Details on revegetation monitoring post-closure including commitment to initiate revegetation trials as early as possible – **Fall / Winter 2006.**

Management approach to waste rock piles and quarry sites - Fall / Winter 2006.

Elaboration of environmentally sensitive times for blasting – Fall / Winter 2006.

Map of Key Migratory Bird Site and commitment to avoiding disturbance between mid-June and late-August – **Fall / Winter 2006**.

Commitment to collecting and analyzing waterfowl data from monitoring surveys, particularly from aerial surveys of RSA – **Construction / Operations**.

Commitment to conducting breeding bird surveys annually during construction phase and at least the first three years of operation – **Construction / Operations**.

Elaboration of mitigation measures to reduce denning, roosting, and nesting sites for avian predators and Arctic foxes – **Fall / Winter 2006.**

Information on management approach for Short-eared Owl - Fall / Winter 2006.

Program details of Inuit monitors on barges/ships – **Detailed Engineering**.

Methodology for interviewing elders and hunters annually – traditional knowledge workshop – **Detailed Engineering.**

Commitment to annual reports summarizing: a) information from traditional knowledge workshop; b) government population and harvest data; and c) on-board Inuit observation and encounter reports – **Detailed Engineering.**

Analyses of natural environmental changes – Construction.

Discussion of caribou data distinguishing between sex and age – **Construction**.

Analysis of waterfowl data collected on aerial and other surveys – **Construction**.

Analysis of breeding bird plot and transect survey data – **Construction**.

Cumberland, in the FEIS and the letter to INAC in early March, had undertaken to participate with other interested parties in collaborative socio-economic monitoring, specifically focusing on issues related to individual and community wellness. This monitoring will be outside the IIBA, and is similar in concept to that agreed for the Jericho and Doris North projects. Cumberland has agreed with INAC, as a commitment, that Cumberland will initiate a process to agree on objectives, scope, terms of reference and roles and responsibilities for this monitoring before the issuance of any project certificate, with a goal of achieving agreement within six months of the issuance of any project certificate – **Underway**.

Cumberland agrees with INAC that labor force adjustments, the transition to full time wage employment and the relationship between economic growth and community wellness are issues that should be included in socio-economic monitoring – **Underway**.

Cumberland has agreed with INAC, as a commitment, to include pre employment orientation for potential hires by Cumberland in the Labor Force Development Plan that will be developed under the terms of the IIBA. This commitment is in recognition that it is in the interests of both potential hires and Cumberland to ensure to the extent practicable that potential hires are well informed of the implications (nature of the work, workforce management, personal and family challenges etc.) of accepting employment with Cumberland – **Construction / Operations**.

Cumberland, in the FEIS and the letter to INAC in early March, had undertaken to participate with other interested parties in collaborative socio-economic monitoring, specifically focusing on issues related to individual and community wellness. This monitoring would be outside the IIBA, and is similar in concept to that agreed for the Jericho and Doris North projects. Cumberland has agreed with GN, as a commitment, that Cumberland will initiate a process to agree on objectives, scope, terms of reference and roles and responsibilities for this monitoring before the issuance of any project certificate, with a goal of achieving agreement within six

months – **Underway**.

Cumberland agrees with GN that labor force adjustments, any pressures on physical and social infrastructure (including by emergency response planning), socio-economic impacts of public use of the access road, and community physical and mental health are issues that should be included in socio-economic monitoring – **Underway.**

Cumberland also agrees with GN that consultation and traditional knowledge will be integral to socio-economic monitoring methodologies – **Underway.**

Cumberland also agrees that socio-economic monitoring results will be used to make recommendations to participating parties on measures to address identified community wellness challenges. This would include recommendations for action by Cumberland where monitoring results indicate negative relationships between community wellness indicators and the project and/or opportunities for enhancing project benefits – **Underway.**

Cumberland commits to engage throughout the life of the project with the GN Department of Education in Baker Lake on – **Construction / Operations**:

- Cumberland's provision of opportunities for training and education including under the Apprenticeship, Trade and Occupations Certification Act
- The working relationship between the Department of Education and Cumberland as this relates to Cumberland's training programs for its workforce
- o Information exchange on workforce preparation requirements
- o Cumberland's commitment under the IIBA to provide supervisory and management training
- o Cumberland's commitment under the IIBA to provide initiatives specific to youth

Information made available by or to Cumberland under the terms of the IIBA in the areas of support to businesses in accessing project opportunities will be forwarded to the GN – **Construction / Operations**.

Cumberland commits to discussions with the GN Petroleum Products Division at least annually for the purpose of planning project jet fuel requirements – **Construction / Operations.**

Cumberland commits to engage throughout the life of the project with the GN Department of Health and Social Services on – **Construction / Operations / Closure**:

- Cumberland's activities covered by all relevant health legislation, including health legislation relevant to operating mines with more than 50 employees
- Cumberland's commitment under the IIBA to develop the annual Baker Lake Wellness Report and Implementation Plan

Cumberland's commitment under the IIBA to provide employment support including counseling workshops and programs – **Construction / Operations.**

Cumberland undertakes to develop an operational plan for the road which ensures maintenance of its status as a private road. Cumberland will develop this plan in collaboration with INAC, KIA, NTI, GN, and the Baker Lake HTO and Hamlet council – **Construction / Operations**.

Commitment to reassess archeology sites – **Detailed Engineering.**