



December 10 2010

Paul Mercredi, Environmental Assessment Officer
Mackenzie Valley Review Board
200 Scotia Centre
Yellowknife, NT
X1A 2N7

Via email: pmercredi@reviewboard.ca

Re: Avalon Rare Metals Incorporated Nechalacho Rare Earth Element Project EA 1011-001

Dear Mr. Mercredi,

Please find attached the Government of the Northwest Territories comments on the Draft Terms of Reference for the Environmental Assessment of Avalon Rare Metals Inc. project EA 1011-001.

Please contact Gavin More at 920 6595, or Gavin_More@gov.nt.ca if you have any questions concerning this submission.

Sincerely

Gavin More
Manager
Environmental Assessment and Monitoring
Environment and Natural Resources

GNWT COMMENTS ON DRAFT TERMS OF REFERENCE

WILDLIFE

TOR Reference	3.3.6 Impacts on the Biophysical Environment, Wildlife
Other reference	Appendix A.10: Existing Environment, Biophysical Environment Canadian Wildlife Service letter to Review Board, Dec.9/10

In reference to section 3.3.6, and Appendix A subheading 10) where the TOR specifies the need to identify species under *Species at Risk Act* (SARA), and also in reference to the Canadian Wildlife Service letter addressed to the Review Board of December 9 2010, the GNWT would like to provide further clarity regarding roles and responsibilities for species at risk.

The GNWT notes that, in addition to the Federal SARA, the Proponents and the Review Board must also take into account the GNWT's newly enacted legislation, *Species at Risk (NWT) Act* which applies to any wild animal or plant species managed by the Government of the Northwest Territories, on both public and private lands, including private lands owned under a land claims agreement. The GNWT also recommends that species assessed by COSEWIC but not identified on any Schedules under SARA as well as any species on the NWT General Status Ranks considered "at risk" in the NWT be included as a requirement to ensure identification and protection of all wildlife at risk.

To assist the Proponents, the GNWT's recommended steps for considering Wildlife at Risk in Environmental Assessment and Environmental Impact Reviews are:

1. Verify appropriate identification of species during Screening
2. Notify Competent Minister (s) or Minister of ENR and expert department (s) if development overlaps with range of Wildlife at Risk species
3. Determine whether the development is likely to affect Wildlife at Risk or its critical habitat or its habitat covered by a regulation
4. Review and evaluate proposed monitoring for Wildlife at Risk
5. Verify that mitigations and monitoring fit with species recovery strategies, action plans, management plans, or other recovery documents.

**TOR Reference: Appendix A
 Biophysical environment
 Section 9)**

Under Appendix A section 9 the TOR states:

“Describe the biophysical environment within the relevant environmental assessment study areas. The following description should be at a level of detail sufficient to allow for a thorough assessment of project effects. Describe the following:

9) Wildlife (including resident and migratory bird species), wildlife habitat and migration corridors. Special emphasis will be placed on key harvested species including moose, caribou and furbearers.”

The GNWT requests the consideration of specifically barrenground caribou in the area of the mine site, and boreal caribou in the area of the hydrometallurgical facility as well as the South Slave transportation corridor.

**TOR Reference Appendix F, Wildlife
 Section 3**

The TOR states: Describe how Nechalacho Project planning has considered potential impacts on wildlife and wildlife habitat at both sites, best management practices to minimize impacts on wildlife, and what mitigation commitments have been made, with specific consideration of:

- a. rules for road use by employees and contractors, including on the highway between Hay River and Pine Point;
- b. minimizing wildlife access to project components (e.g. by reducing attractants); and
- c. spill avoidance techniques and spill response plans for the transportation routes.

The GNWT recommends special consideration also be given to

- a. procedures for minimizing wildlife interaction at the airstrip at Thor Lake
- b. procedures for minimizing wildlife interaction at the tailings management facilities for both Thor Lake and Pine Point.

Additionally, the GNWT suggests c) might be more appropriately placed in under Appendix J: Biophysical environmental monitoring and management plans, under subheading 4) as a ‘conceptual monitoring and management plan’.

ENVIRONMENT

TOR Reference 3.3.8, bullet 2) and 4) Appendix H, part 2.g

The terms “established” and “approved” have been used to describe the expected air quality modelling software to be used by the proponent. The GNWT recommends that a more definitive approach be taken to ensure that the most up to date program is used to predict the dispersion and deposition of the proposed operations’ emissions.

Specifically, GNWT recommends the terms “approved air quality model” and “established air quality model” be replaced with:

- “air quality model approved by Department of Environment and Natural Resources (ENR) and Environment Canada (EC)”; or,
- “CALPUFF version 6 air quality model with 3-D met data”.

TOR Reference 3.3.8, bullet 3

The GNWT recommends that the following be added to the existing bullet:

- Avalon will further compare and contrast this range of emissions to those from alternative fuels, such as oil, natural gas, and hydro-electricity, based on an equivalent BTU output to that of coal.

TOR Reference 3.3.8, bullet 5, part b Appendix H, part 2e

The GNWT recommends that the bullets be replaced with:

- Provide analytical results detailing the composition of the tailings dust, the concentrate, and any intermediate product that may have the potential to become fugitive dust.

TOR Reference Appendix H, part 3c

The GNWT recommends that this bullet be replaced with:

- Develop and describe an incineration management plan that follows the guidance presented in Environment Canada’s Technical Document on Batch Waste Incineration,

to ensure compliance with the Canada Wide Standards for Dioxins and Furans from incineration.

TOR Reference 3.5 Accidents and Malfunctions

The GNWT recommends specific information on contingency plans be included for spills when referencing ‘accidents, malfunctions or unforeseen impacts of the environment on all aspects of the development’.

**TOR Reference Appendix B Development Description
24 & 25**

Under 24 the GNWT recommends providing a description of the ‘waste disposal facilities’ (assuming a landfill) for clarification, such as a potential landfarm, soil treatment facility, incineration facility and temporary waste management facility. These additional facilities should be considered for all references to ‘waste disposal facilities’ throughout the Terms of Reference document.

Under 25 the Terms of Reference document requests a description of type and volumes of hazardous materials, however the GNWT recommends that the same information be described for all waste (camp waste, etc.), in order to assist with preparation of the ‘Conceptual Waste Management Plan’ listed under Appendix J.

**TOR Reference Appendix B
Mining and materials storage, Thor Lake**

The GNWT recommends the addition of the following bullet

- transport, storage and management of fuel and reagents

**TOR Reference Appendix B
Closure and Reclamation, both sites**

The GNWT recommends the addition of the following bullet

- Decommissioning and reclamation of all waste management facilities (landfill, landfarm, etc.)

**TOR Reference Appendix B
Closure and Reclamation, bullet 2**

Bullet 2 reads: “Reclamation of tailings management facilities, and all other site water management facilities at both the Thor Lake and Pine Point sites”

The GNWT recommends adding the following sub bullet to bullet 2

- Include consideration of the use of a historical open pit intended for water management and its subsequent reclamation.

**TOR Reference Appendix L, 2e
Closure and Reclamation**

Under 2e the GNWT recommends the identification of standards or criteria which will be applied to ‘a conceptual program and schedule for any progressive reclamation envisioned.”

SOCIO ECONOMIC ISSUES

TOR Reference 3.4 Impact of Human Environment

There is an inconsistency in impact assessment methodology outlined between the biophysical and human environment. The GNWT recommends that the impact assessment on the human environment 3.4 reflect the same impact assessment steps and significance determination outlined for the biophysical environment outlined under 3.3.1. A consistent application of 3.3.1 throughout the DAR will ensure a standard approach predicting project specific impacts, including the development of mitigation measures, and monitoring plans.

TOR Reference 3.4 Impacts on the human environment

The TOR states: “Estimate the total economic activity to be generated by the development (e.g. employment and income generation including multiplier effects and taxes) and associated socio-economic impacts, with a focus on the distribution of beneficial and adverse impacts. Include a description of any plans or strategies to mitigate adverse socio-economic impacts.”

The GNWT recommends that predictions regarding business and employment opportunities clearly specify project total benefits and NWT total benefits. Furthermore, a broader consideration of taxes is recommended, specifically personal and corporate income generation.

TOR Reference General use of language

The GNWT suggests that the word ‘northern’ be substituted to ‘NWT’ to provide more specific terminology.

**TOR Reference Appendix K: Human Environment
K1.9 Business Opportunities**

The TOR states: “The developer’s policies, plans, and commitments associated with maximizing contracting to Aboriginal and Northern-owned and operated businesses, with emphasis on assisting business development initiatives and joint ventures with Akaitcho region-based businesses.”

The GNWT recommends emphasis on assisting business development initiatives apply (in the following order) to

- a. Impacted communities
- b. Regional communities
- c. The greater NWT community.

Business development initiatives should also include assistance in the development of NWT manufacturing and industrial resources.

TOR Reference 3.4 Impacts on Human Environment

The TOR states: “Also include a discussion on impacts to Great Slave Lake fisheries and tourism operators”

The GNWT recommends tourism operators to be substituted with tourism activities.

TOR Reference Appendix K5 Human environment, monitoring and management plans

The TOR states: “Describe any commitments, plans and strategies to engage with responsible authorities and potentially-affected communities in monitoring impacts on the human environment”

The GNWT requests the addition to impacts on Great Slave Lake fisheries and tourism activities.

TOR Reference 3.4 Human environment

The TOR states: “Describe commitments and plans to monitor, evaluate and manage impacts on the human environment.”

The GNWT requests the addition of ‘reporting’ to these action items.

TOR Reference K1 Employment and Business Opportunities

Under K1 Employment, the GNWT recommends adding the following bullets

- a. Provide plans, strategies and incentives to ensure that the companies employees, contractors, and contractors employees reside in the NWT
- b. Provide details on travel and site access policies for local and regional northern residents as well as southern hires, including northern attraction and retention plans and strategies.