



November 29, 2012

VIA EMAIL

Paul Mercredi
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre
Box 938, 5102-50th Ave
Yellowknife, NT
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Dear Mr. Mercredi,

RE: Technical Report Submission
EA1011-001 Thor Lake Rare Earth Element Project
Avalon Rare Metals Incorporated

Attached to this cover letter is the Government of the Northwest Territories Technical Report for the Avalon Rare Metals Incorporated Thor Lake Rare Earth Element Project environmental assessment. It is requested this submission be posted to the Mackenzie Valley Environmental Impact Review Board public registry.

If you may require any further details, please contact Shafic Khouri, Environmental Assessment and Regulatory Analyst, at shafic_khouri@gov.nt.ca or (867) 920-6335.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Holder". The signature is stylized and cursive.

Joel Holder
Manager, Environmental Assessment and Monitoring
Department of Environment and Natural Resources
Government of the Northwest Territories

Attachment

Government of the Northwest Territories
Technical Report for the Avalon Rare Metals Incorporated
Thor Lake Rare Earth Element Project

EA1011-001 [2010]

November 29, 2012

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Abbreviations and Acronyms

AIA	Archeological Impact Assessment
AQMMP	Air Quality Monitoring and Management Plan
Avalon	Avalon Rare Metals Incorporated
DAR	Developer’s Assessment Report
EA	Environmental Assessment
EC	Environment Canada
EAP	Employee Assistance Program
EPCM	Engineering, Procurement, Construction and Management
GNWT	Government of the Northwest Territories
IBA	Impact and Benefit Agreement
IMP	Incineration Management Plan
IR	Information Request
IRR	Information Request Response
LSA	Local Study Area
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVRMA	<i>Mackenzie Valley Resource Management Act</i>
NWT	Northwest Territories
RSA	Regional Study Area
SARC	Species at Risk Committee
SEA	Socio-Economic Agreement
SOP	Standard Operating Procedures
TSP	Total Suspended Particulates
Project	Thor Lake Rare Earth Element Project
PWNHC	Prince of Wales Northern Heritage Centre
VEC	Valued Ecosystem Component
WEMP	Wildlife Effects and Monitoring Program
WEMMP	Wildlife Effects Monitoring and Management Plan
WWHPP	Wildlife and Wildlife Habitat Protection Plan (titled as a WEMMP by Avalon)

1. Non-Technical Summary

The Government of the Northwest Territories (GNWT) is an intervener to the Avalon Rare Metals Incorporated (Avalon) Thor Lake Rare Element Project (Project) environmental assessment (EA). This Technical Report has been issued after active EA involvement and review of the Developer's Assessment Report (DAR), Information Requests (IRs) and other materials available on the public registry for the Project.

The GNWT is pleased Avalon has developed a conceptual Wildlife Effects Monitoring and Management Plan (WEMMP) for the Project and it looks forward to the continued development of this plan as some concerns previously identified still need to be clarified. The GNWT recommends Avalon rename its WEMMP to the more appropriate title of a Wildlife and Wildlife Habitat Protection Plan (WWHPP). Avalon has committed to collaboratively develop the WEMMP and the GNWT is willing to work cooperatively with Avalon, Aboriginal governments, co-management authorities and other interested groups in developing this plan (the plan as defined in section 5.1.1 of this report).

The GNWT recognizes the potential for the Project to contribute to cumulative effects on wildlife in the Northwest Territories (NWT). As such, the GNWT has made recommendations to Avalon (in section 5.2 of this report). The GNWT supports the fulfillment of cumulative effects monitoring objectives through active collaboration, which may include regional scale monitoring programs developed jointly between governments, developers, Aboriginal groups and other interested parties. At this time, the GNWT does not see a requirement for a follow-up program to test wildlife predictions (i.e. a WEMP as defined in section 5.1.2 of this report). However, should that change, the GNWT will engage Avalon to ensure a Project WEMP follows standard regional monitoring protocols so the data from these programs will contribute to larger cumulative effects assessments.

The Mackenzie Valley Land and Water Board (MVLWB) is the primary authority to ensure environmental monitoring and reporting will occur for the Project. The GNWT believes any additional environmental monitoring for the Project is best achieved through agreement between affected communities and Avalon.

Overall, as the Project relates to biophysical matters, the GNWT agrees with the wildlife, air and archaeology mitigation commitments that Avalon has made throughout the EA process for the Project. The GNWT believes the Project can be undertaken in a way that does not pose a significant adverse impact to the environment, provided the commitments made by Avalon during EA and the recommendations put forward in this Technical Report are carried out. However, the GNWT recognizes the potential for the Project to contribute to cumulative effects on NWT wildlife. As recommended in section 5.2 of this report, Avalon involvement in

cumulative effects assessment for the Project and possible regional scale monitoring can be considered during future discussions with the GNWT and other interested parties.

General areas of outstanding socio-economic concern for the GNWT involve topics of employment and education; training and professional development; health and social wellness; business development; tourism and traditional economy; and socio-economic closure planning, monitoring and follow-up. As such, the GNWT has made recommendations to Avalon to provide additional information and to adopt various commitments for the life of the Project. These recommendations are detailed in section 6 of this report.

Overall, as the Project relates to socio-economic matters, the GNWT recommends to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) that a formal follow-up program, in the form of a Socio-Economic Agreement (SEA) between the GNWT and Avalon, be a condition of Project approval. A SEA would provide for monitoring and reporting of socio-economic concerns and allow for testing of predictions made by Avalon during Project EA. A SEA allows for assessing the success of mitigation and public reporting, and allows for further discussions. This agreement would remain in place for the life of the Project.

2. Introduction

The GNWT promotes and supports the sustainable use and development of natural resources to protect, conserve and enhance the environment of the NWT for the social and economic benefit of all residents. This responsibility is shared with Aboriginal, federal, territorial and municipal governments, boards and agencies and every resident of the NWT.

The GNWT has been an active participant throughout the MVEIRB EA for the Project. The GNWT has also met with Avalon on multiple occasions to clarify information and discuss commitments that will mitigate possible impacts arising from the Project. Summaries of these discussions and agreed-upon commitments are on the public registry for this Project.

This submission represents the GNWT Technical Report on the Project (EA1011-001). The intent is to provide context to issues and propose mechanisms by which they can be resolved. The topics discussed in this submission are outlined in the table of contents found on page i.

3. Atmospheric Environment

The GNWT has participated throughout review and assessment of the air quality component for the Project. Avalon conducted an air quality assessment that included emission inventories, dispersion and deposition modeling for both sites of the Project, as well as brief sections relating to a dust control plan and an air quality monitoring plan. The GNWT reviewed each of these components and presented their queries and concerns in IRs and followed up with outstanding items during Technical Sessions.

During Technical Sessions, Avalon committed to developing an air quality monitoring and management plan (AQMMP) in consultation with the GNWT and EC, which would include, but not be limited to, stack testing (post commissioning of diesel generators, mine air heaters and the sulfuric acid plant stack), as well as total suspended particulates (TSP) and continuous sulfur dioxide (SO₂) monitoring for one year. The GNWT supports this Avalon commitment. The GNWT expects an AQMMP will include, but not be limited to, emissions management and minimization, air quality monitoring, and measures for mitigation and adaptive management.

Avalon further committed during the technical session to develop and implement an Incineration Management Plan (IMP) in consultation with Environment Canada (EC) and GNWT, incorporating the information provided in the EC Technical Document for Batch Waste Incineration (2010). The GNWT supports this Avalon commitment in general, which has satisfied GNWT concern with one exception.

It is understood the specific details of the IMP will be finalized prior to Project licensing; however, during Technical Sessions, Avalon noted they did not agree that incinerator stack testing would be needed for the Project.

Incinerators that are not operated or maintained properly lead to the formation and release of toxic, persistent and bioaccumulative organic compounds (including dioxins and furans) onto land and into water. It is understood that if the guidance provided in the EC Technical document (noted above) is followed – specifically, appropriate incinerator selection, appropriate waste batching, appropriate operations, training, maintenance, and documentation – then the incinerator will perform as designed. However, to verify that those actions are being conducted properly, stack testing is required. Stack testing is a standard method to quantitatively demonstrate that an incinerator is performing as designed and is conforming to emission limits set out in the Canada Wide Standards for Dioxins and Furans. The complex nature of incineration and the difficulties demonstrated by other incinerator operations in the NWT provides further evidence that stack testing is a necessary component for appropriate incinerator management. Stack testing, upon incinerator commissioning and periodically thereafter, is a standard approach to demonstrate conformance, trigger mitigative

measures and guide adaptive management. The GNWT believes that stack testing is a fundamental component to ensure an incinerator operates as per its design and that it will not be generating and releasing persistent, toxic and bioaccumulative pollutants to the environment.

Recommendation #1:

The GNWT recommends the Avalon IMP incorporate stack testing at Project commissioning and periodically thereafter.

4. Archaeology

Avalon has completed archaeological impact assessments (AIA) of the Project mine site and areas of new ground disturbance associated with the Project hydrometallurgical facility in the former Pine Point area (i.e. the marshalling yard). The Prince of Wales Northern Heritage Centre (PWNHC) has received a final report on the AIA work conducted in 2011 (NWT Archaeologists Permit 2011-007) and an interim report on the work conducted in 2012 (NWT Archaeologists Permit 2012-005; received August 7, 2012). The AIA of the marshalling yard resolves previously raised archaeological concerns (in GNWT IR 13).

The results of the AIA can be summarized as follows:

- Three previously recorded archaeological sites in the vicinity of the mine site were assessed to determine potential Project impacts. One of these sites (KaPb-2) was determined not to be an archaeological site, as it marked the location of a contemporary exploration camp. The Project archaeologist did not find any definite evidence of cultural material at KaPb-3 and recommends no further work for this site. The 2012 interim report indicates that Project effects to archaeological site KaPb-4 should be limited if the project footprint remains as it is currently proposed.
- Eight new archaeological sites were recorded as a result of the AIA for the Project. Six of these sites (KaPb-6 to 11) are located in the proposed tailings management facility and two (NTL12-01 and NTL12-02) are located on the north shore of Great Slave Lake. The 2012 interim report indicates that potential impacts to all of these sites have been mitigated through systematic data recovery and that archaeological site NTL12-02 may be avoided by Project activities. It is unclear if archaeological site NTL12-01 will be avoided by Project activities.

Recommendation #2:

In order to fully assess the adequacy of the mitigation measures applied for the Project, the PWNHC recommends Avalon provide:

- a. A finalized list of archaeological sites that will be avoided by the Project and its activities.
- b. Detailed results (plan maps, photos, etc.) of the systematic data recovery efforts for the archaeological sites that cannot be avoided by the Project.

Avalon also indicates an Archaeological Site(s) Protection Plan will be developed to facilitate protection of archaeological sites during the construction phase of the Project.

Recommendation #3:

The PWNHC recommends to Avalon that the Archaeological Site(s) Protection Plan:

- a. Demonstrate how avoided archaeological sites will be protected over the life of the project (including closure).
- b. Demonstrate how footprint changes will be assessed for archaeological impacts.
- c. Provide procedures to follow in the event archaeological materials are discovered during Project development or related activities.
- d. Commitment is added to the Avalon commitment table list for the Project.

5. Wildlife

The GNWT is responsible for the stewardship of wildlife resources (other than species listed under the *Migratory Birds Convention Act*), which includes the collection of baseline information; assessing and monitoring the status of wildlife; wildlife habitat; species at risk; wildlife health; assessing impacts on wildlife from human activities; and regulating wildlife protection and use.

5.1. Mitigation Plans and Monitoring Programs

Avalon has committed to several mitigation measures during the EA to protect wildlife. Many are captured in waste management plans and human safety plans for both the Project mine site and hydrometallurgical facility. Some of these plans also fall under the authority of the MVLWB. Additional protection to wildlife is provided under the territorial *Wildlife Act* (and

regulations), territorial *Species at Risk Act*, as well as federal legislation that includes the *Species at Risk Act* and *Migratory Birds Convention Act* (and regulations). In addition, commitments made by a proponent during an EA become part of the project DAR, and therefore fall within the scope of the project EA.

The GNWT is pleased Avalon has developed a conceptual Wildlife Effects Monitoring and Management Plan (WEMMP) for the Project, however continued development of this plan is required to resolve concerns previously identified (GNWT IR 14; Avalon IRR to GNWT IR 14). The GNWT review has also found that what Avalon has presented as a WEMMP is what the GNWT typically refers to as a Wildlife and Wildlife Habitat Protection Plan (WWHPP). Renaming the WEMMP to a WWHPP will establish common language in the development of industry-wide best practices and guidelines as it clearly separates Project-site-specific mitigations, employee and contractor policy and procedures, and monitoring/reporting from a wildlife follow-up program (i.e. a WEMP as defined in section 5.1.2) that tests predictions. This consistency in naming will benefit governments, regulators and other future development projects and developers. For example, a properly identified WWHPP will fall within the authority of the MVLWB for inclusion in licensing and permitting of a project during the consideration of wildlife habitat protection under section 26(1)(h) of the *Mackenzie Valley Land Use Regulations*.

A general definition of what constitutes a WWHPP is found in section 5.1.1 of this report. Similarly, a general definition of what constitutes a WEMP is found in section 5.1.2. Avalon has committed to working with the GNWT and other relevant parties in the development of the Project WEMMP, with the goal of producing a mutually agreed upon plan 90 days prior to the Project construction phase (Avalon IRR to GNWT IR 14).

Recommendation #4:

The GNWT recommends Avalon:

- a. Rename its WEMMP to a WWHPP;
- b. Apply the general WWHPP definition found in section 5.1.1 of this report and continue to collaborate with the GNWT, affected Aboriginal organizations, co-management authorities and any other affected parties in the current development and ongoing review of this plan throughout the life of the Project.

Recommendation #5:

The GNWT recommends Avalon collaborate with the GNWT, affected Aboriginal groups, co-management authorities and any other affected parties should the development of a WEMP (as defined in section

5.1.2) be requested by:

- a. Any affected parties or co-management authorities; or
- b. The GNWT for the purpose of Avalon participating in regional scale monitoring for cumulative effects assessment of possible Project-affected wildlife species such as barren-ground and boreal caribou (see Cumulative Effects section 5.2).

5.1.1. Wildlife and Wildlife Habitat Protection Plan (WWHPP)

A WWHPP (titled as a WEMMP by Avalon) outlines the steps necessary to protect personnel, wildlife, and wildlife habitat within the Project Development Area (PDA), also commonly described as a project direct “footprint.” A WWHPP documents the day-to-day standard operating procedures (SOPs) including mitigations, reporting and best practices for the Project site.

The WWHPP requires the development of clear protocols and SOPs for project employees and contractors to ensure the implementation of site-specific mitigation. The WWHPP must include measures for both compliance monitoring and reporting, and environmental monitoring and reporting. This helps ensure human safety by reducing the potential for interaction between people and wildlife; and reduces or prevents any direct impacts to wildlife and the PDA. The plan is required to provide a set of instructions to mine staff, to show diligence on part of the developer and to comply with legal requirements. Typically, site-specific management data is not directly relevant to regional scale monitoring, but some information may be incorporated into a regional scale monitoring program (e.g., tracking of on-site wildlife mortalities).

5.1.2. Wildlife Effects Monitoring Program (WEMP)

A WEMP encompasses monitoring at a Local Study Area (LSA) and Regional Study Area (RSA) scale during the life of the project. In effect, it is a follow-up program as defined under the *Mackenzie Valley Resource Management Act (MVRMA)*.¹ A WEMP details larger scale monitoring objectives and methods (e.g., monitoring wildlife species threatened by potential increases in harvester access due to project roads). The WEMP provides an avenue to test the

¹ As stated in the *Mackenzie Valley Resource Management Act*, Part 5, Section 111, Definitions, “follow-up program” means a program for evaluating:

(a) the soundness of an environmental assessment or environmental impact review of a proposal for a development; and

(b) the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal.

effectiveness of impact predictions made by a developer during a project EA, including mitigation techniques employed during the construction, operation, closure and post-closure phase of the project. A WEMP does not include mitigation measures per se as it, by definition, is strictly a process for monitoring and testing specific effects questions. The results of this will be used to support adaptive management approaches if needed and to contribute to future cumulative effects assessments. Results from a well-designed WEMP can also be used to inform best practices associated with future development projects in the NWT and the Slave Geological Province.

An effective WEMP should:

- Be focused on identified project Valued Ecosystem Components (VEC) that are typically found in or near the area surrounding the project;
- Be conducted at a project local study area and/or project regional scale that is appropriate to the proposed predictions for the project VEC;
- Use tested standardized protocols/methods/approaches that are in use by other mines so that consistent monitoring results can be combined at a regional scale;
- Be developed and reviewed in collaboration with government, affected Aboriginal organizations, developer(s), co-management authorities and any other affected parties; and
- Be developed such that monitoring and mitigation techniques can be revisited and revised pending new information (i.e., developed using an adaptive management framework).

The GNWT maintains that regional scale monitoring should take place as an active collaboration between governments, developers, Aboriginal groups and other interested parties. For example De Beers Canada Inc., Rio Tinto Canada Inc., and BHP Billiton are leading a joint regional scale program that is designed to monitor grizzly bear abundance and distribution in and around the mine areas via DNA sampling of hair snags (Rescan, 2012). Information from this study can increase the understanding of grizzly bear population in the Slave Geological Province and therefore assist in development management options and cumulative effects assessment.

5.2. Cumulative Effects

The GNWT is concerned with how the Project contributes to the overall amount of disturbance on the landscape; that is, cumulative effects. Other disturbance factors include other industrial projects, climate change, increased road access and fire. A cumulative effect is expected to be greater than the sum of individual factor effects – i.e. there is an incremental or additive effect

as individual factors act together, creating an effect beyond those predicted for each individual factor. While an individual mine may have limited impact on wildlife distribution and abundance, its contribution to the overall amount of development on the landscape could be sufficient to significantly and adversely impact wildlife – i.e. there may be a threshold of development disturbance above which a given species becomes significantly and adversely impacted (see Environment Canada, 2012, for an example). Assessing individual site effects alone may not reveal impacts occurring on a cumulative level and can consequently limit decision-makers (e.g. land and water regulators, wildlife management bodies, etc.) in their ability to make sound judgements at a population and/or regional scale.

Depending on the characteristics of the valued wildlife component, cumulative effects programs may require regional-scale monitoring. In the NWT, typical species that require regional-scale cumulative effects monitoring because of their large range size include grizzly bears, boreal and barren-ground caribou, wolverines and raptors. Since the proposed Project is found within the Bathurst barren-ground caribou range along with several other developments (Figure 1), the GNWT does have concerns for regional-scale cumulative effects on the Bathurst barren-ground caribou herd. This is especially the case as the herd is stable but still low in numbers. The GNWT also has concerns about the cumulative effects of disturbance on boreal caribou, which are a federally listed species at risk (see section 5.3 for details on boreal caribou).

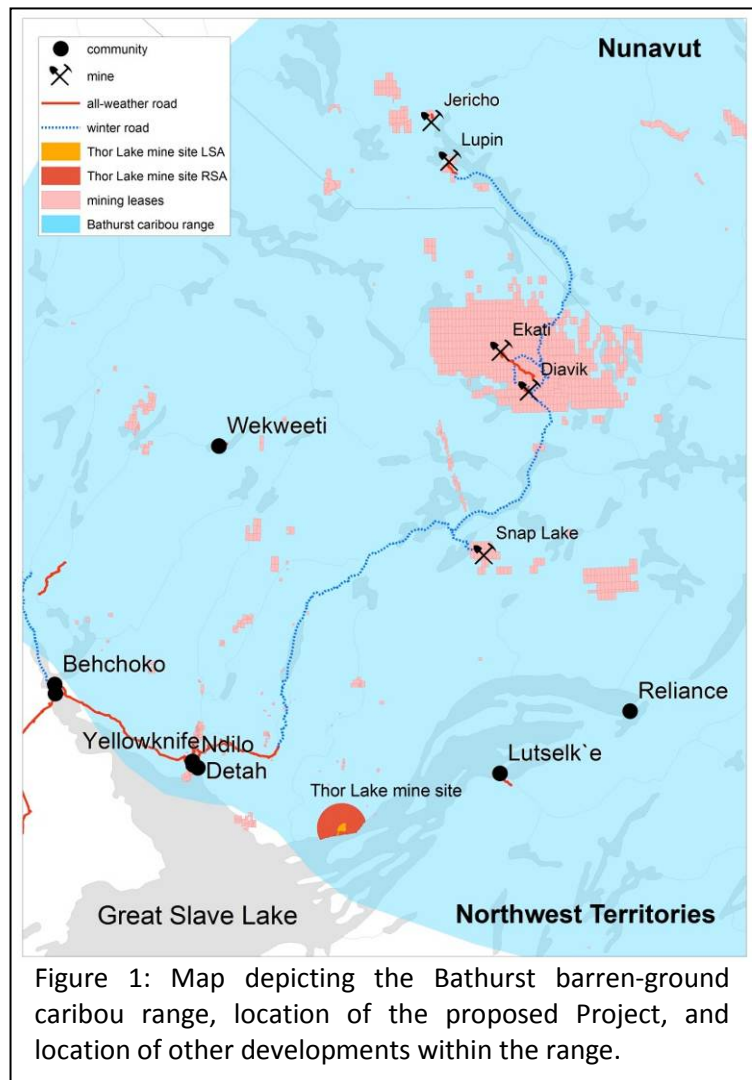


Figure 1: Map depicting the Bathurst barren-ground caribou range, location of the proposed Project, and location of other developments within the range.

The GNWT believes cumulative effects assessment, monitoring and mitigation needs to be approached in a collaborative manner. This may include the joint development of regional-scale monitoring programs between governments, developers, Aboriginal groups, co-

management authorities and other interested parties, as appropriate. Cumulative effects assessment is not a task that can or should be taken up by any single agency. The GNWT is in the process of hiring a Cumulative Effects Biologist to lead the GNWT cumulative effects program. The GNWT will also be organizing species-specific cumulative effects workshops in the near future; the GNWT expects the participation of various interested parties, including governments, developers and co-management authorities. Avalon participation in regional scale monitoring for cumulative effects assessment related to the Project, and possible GNWT request for a WEMP (a program as defined in section 5.1.2; also see Recommendation #5b above), can be considered during future discussions on possible Project-affected species such as barren-ground and boreal caribou.

Recommendation #6:

The GNWT recommends Avalon participate in species-specific cumulative effects workshops with governments, developers, co-management authorities and other interest parties.

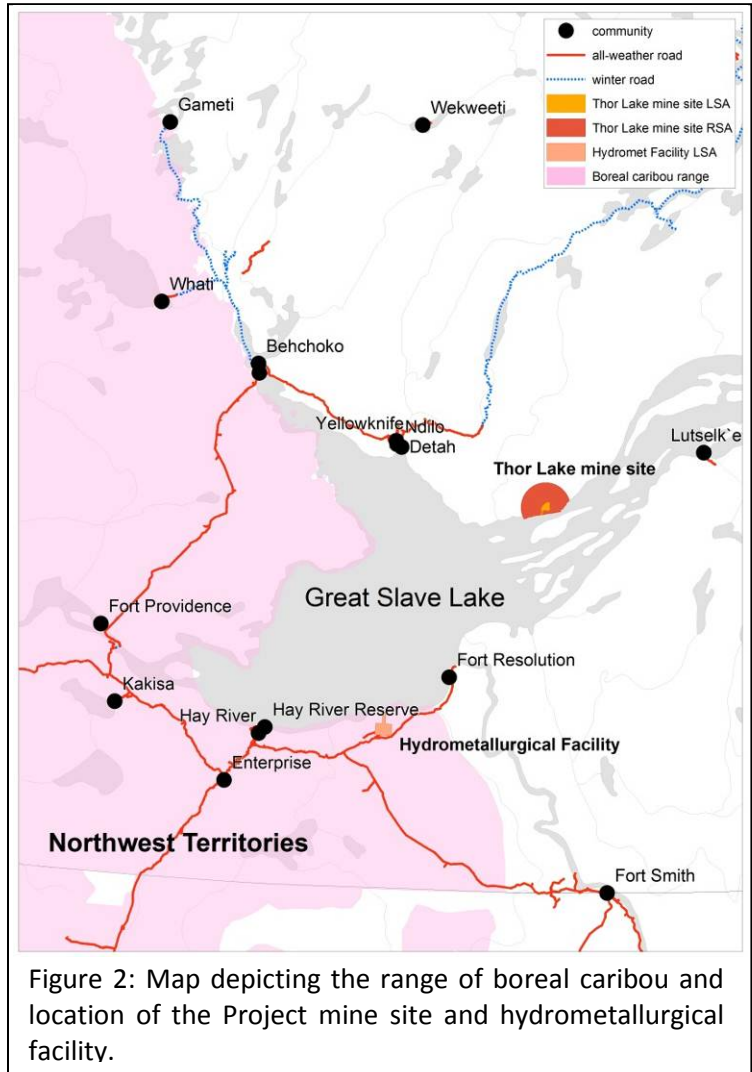
5.3. Boreal Caribou

Boreal caribou are listed as a threatened species under the federal *Species at Risk Act* and a recovery strategy is a legal requirement for species with this listing. The national Recovery Strategy for the Woodland Caribou, Boreal Population, in Canada (the Recovery Strategy) was posted to the federal Species at Risk Registry on October 5, 2012. The Recovery Strategy will affect strategies, plans, and programs of responsible wildlife co-management authorities in the NWT, which include the GNWT.

While the NWT boreal caribou population has been assessed as self-sustaining in the Recovery Strategy, maintaining this status means that at least 65% of boreal caribou range in the NWT must remain undisturbed (that is, protecting critical habitat means ensuring 65% of boreal caribou habitat remains undisturbed in perpetuity). Disturbance includes both anthropogenic (man-made footprint plus a 500 meter buffer) and natural fire disturbance. Accomplishing this means implementing actions described in the 2010-2015 GNWT Action Plan for Boreal Woodland Caribou Conservation in the Northwest Territories; developing range management plans as per the national Recovery Strategy; and implementing a comprehensive monitoring program that tracks boreal caribou population trends and various other indicators including disturbance. The GNWT believes a collaborative approach is necessary to develop management and monitoring plans for boreal caribou in the NWT.

The NWT Species at Risk Committee (SARC), established under the territorial *Species at Risk Act*, is responsible for assessing the status of species that may be at risk in the NWT. The SARC has an obligation to carry out its assessment using the best available information that includes Aboriginal traditional knowledge, community knowledge and scientific knowledge. Boreal caribou status will be assessed by the SARC in December 2013; the pending status will serve to guide the future plans and actions of the GNWT and other co-management authorities in relation to the conservation of this caribou subspecies.

The projected lease area for the Project mine site is outside the boreal caribou range boundary, but the Project hydrometallurgical facility is entirely within the range (Figure 2). The facility, however, is on former disturbed Pine Point Mine site and other anthropogenic and natural disturbance areas. The hydrometallurgical facility site is also nearly devoid of vegetation for several square kilometers; this will change over time, however, as the area naturally regenerates into contiguous habitat that is more suitable for boreal caribou. The Project hydrometallurgical facility footprint will need to be assessed by responsible co-management authorities under the principles defined in the Recovery Strategy and the soon to be developed range management plans and action plans that are requirements under the strategy.



5.4. Moose

Current harvest restrictions on the Bathurst caribou herd indicates that moose populations will be subjected to increased harvesting pressures. With highways continually being improved, in addition to the increased road access required for the Project hydrometallurgical facility, hunters may be able and willing to travel greater distances to hunt moose.

The GNWT surveys moose regularly throughout the NWT to assess moose population sizes and trends. A moose survey is currently being conducted in the North Slave Region and there will be an upcoming moose survey in the South Slave Region in December, 2012. In the ongoing cooperative development of a WWHPP for the Project, the GNWT will likely provide advice on the mitigation of any direct effects to moose associated from the Project.

5.5. Environmental Monitoring

The MVLWB, governments and industry have made progress toward establishing best practices for environmental monitoring in the North. The GNWT is of the view that the primary authority to ensure environmental monitoring and reporting occur at the Project is the MVLWB through its Land Use Permit and Water Licence authorization systems. For some matters, such as species at risk, regional scale monitoring by co-management authorities is also required. The GNWT believes any additional environmental monitoring for the Project is best achieved through agreement between affected communities and Avalon.

5.6. Wildlife Conclusions

The GNWT agrees with the wildlife mitigation commitments that Avalon has made throughout the EA process for the Project. The GNWT believes the Project can be undertaken in a way that does not pose a significant adverse impact to the environment, provided the commitments made by Avalon during EA and the recommendations put forward in this Technical Report are carried out. However, the GNWT recognizes the potential for the Project to contribute to cumulative effects on NWT wildlife, as this project will add to the overall amount of disturbance on the landscape. As recommended in section 5.2 of this report, Avalon involvement in cumulative effects assessment for the Project and possible regional scale monitoring can be considered during future discussions with the GNWT and other interested parties.

6. Socio-Economics

6.1. Employment

Avalon estimates the direct personnel requirements for the Project will include:

- 880 person years during construction;
- 340 person years during operations; and
- 30 employees during the reclamation phase (20 at the mine site; and 10 at the hydrometallurgical site) (DAR section 7.1.3; DAR Appendix K).

Avalon predicts 880 person years of employment during construction phase for both sites, however, they also note that during the same phase, the direct personnel requirements for the mine site are estimated at 80 employees and for the hydrometallurgical site are estimated at 87 employees. This discrepancy is not reconciled in terms of how the person years were calculated.

In terms of northern participation, Avalon predicts the workforce will consist of:

- 170 person years, or 19%, during construction; and
- 190 person years (including in-migrants), or 55%, during operations (DAR section 7.1.3; DAR Appendix K).

There were no estimates given for northern participation in the reclamation workforce.

The GNWT appreciates that the employment numbers provided are projections and that many of the jobs require specific skills and technical areas, which may not be readily available in the NWT labour force. Avalon states that if jobs cannot be filled by residents of the RSA, it is anticipated they will be filled by in-migrants to the NWT or employees from across Canada (DAR section 7.1.3). However, the company has also acknowledged that many of the jobs are skilled and technical, and there may not be northerners to fill the positions.

Avalon hires according to skills and experience, without discrimination based on age, disability, gender, nationality, race, religion and sexual orientation (Avalon Corporate Sustainability Report 2011). Avalon also states that it is committed to operate under a preferential northern and Aboriginal hiring policy and that “NWT residents with the requisite skills will have the first chance to be hired” (DAR section 7.1.3 and 10.6.4.1). Avalon further clarifies that it will make “all reasonable efforts to employ Aboriginal employees, and secondarily to hire personnel from the NWT” as per Aboriginal Accommodation Agreements (Avalon IRR to GNWT IR 3). Avalon also states that its contractors “will abide by the northern hiring policy when hiring staff for the Project” (DAR section 7.1.3).

To help achieve the goals outlined above, Avalon says it will provide two-way flights from Yellowknife, Edmonton, Lutsel K'e and Hay River to the mine site and daily two-way bus transportation from Hay River and Fort Resolution to the hydrometallurgical site (DAR section 4.9.1). Avalon also says it will investigate ways to accommodate employees and pay transportation costs where feasible for northern employees working at the hydrometallurgical site and rotating on a weekly basis (GNWT-Avalon meeting report, December 7, 2011).

Avalon commits to "encourage in-migration of any southern hires" to help maximize northern participation in the project workforce (Avalon IRR to GNWT IR 7); however, Avalon does not provide details on how it will encourage southern hires and what the specific list of incentives for relocation and retention are (Avalon IRR to Lutsel K'e Dene First Nation IR 1).

According to the NWT Bureau of Statistics, as of September 2012, there are 2,200 unemployed people in the NWT. This does not include the 6,500 who are not in the labour force, although this statistic, in addition to including the discouraged workforce (those not working and no longer looking for work), also includes students, retired and disabled persons. The 2009 NWT Community Survey indicated that there were 408 unemployed people in the South Slave region, which includes the communities of Enterprise, Fort Smith, Fort Resolution, Hay River, Kakisa and Lutsel K'e. It is anticipated the workforce availability will grow with other mines nearing closure.

Avalon says shorter rotation schedules, development of the Project closer to communities on the south side of Great Slave Lake and the time overlap of the Project with other mines nearing closure, provides alternative employment opportunity. Therefore, Avalon believes it is possible that the projected number of northern hires for all phases and Project sites could be higher, as skilled and experienced labour currently resides in the NWT. Further information regarding recruitment and pre-employment plans to maximize the opportunities and number of jobs for northerners is requested.

While Avalon has referenced its recruitment and training initiatives to maximize northern employment and focus on apprenticeships and technical positions, it is unclear whether contractors and subcontractors will support training and provide apprenticeships in order to develop a skilled northern workforce.

Recommendation #7:

The GNWT recommends Avalon:

- a. Provide further details and/or clarify the following in the anticipated Human Resources Management Plan: recruitment, hiring and training processes and initiatives used to fill apprenticeship and technical occupations; hiring priorities; methods for the

maximization of northern employment; and methods for the support of promotion, advancement and career development of northerners.

- b. Provide quantitative predictions for Aboriginal resident hiring for each phase of the project, as well as northern resident hiring for the closure phase.
- c. Provide further details on the job positions in each phase of the Project for which Avalon expects to hire southern workers.
- d. Provide additional information on the development of apprentice and trade positions in accordance with the requirements of the *NWT Apprenticeship, Trade and Occupations Certification Act*, including which job positions will be apprenticeship positions and the associated supports that will be given to northern apprentices.
- e. Provide detail and clarification on travel allowances, employment incentives and benefits provided to NWT-based employees as compared to employees living outside the NWT.
- f. Finalize detailed job descriptions, including required skills and education
- g. Establish a monitoring and annual reporting process for contractor employment data, and for the programs and practices put in place to support training and development of a skilled northern workforce, including apprentices.
- h. Clarify processes and mechanisms that will be in place to oversee and enforce contractor compliance with Avalon northern hiring processes and support for training and apprenticeships for northern employees.

6.2. Education, Training and Professional Development

Avalon has not completed the Human Resources Management Plan, detailed job descriptions and strategic recruitment plan for the Project. It is anticipated these documents will provide specifics on how Avalon plans to deliver substantial training and apprenticeship opportunities to help strengthen local communities and provide individuals with transferrable skills, improve distribution of Aboriginal employees throughout all occupational levels, minimize employment barriers, and maximize northern employment and skills development.

A goal of Avalon is to increase local participation rates and fill apprenticeship and technological occupations through class-room education, on-the-job training, and by collaborating with Aurora College, the Mine Training Society and other organizations (Avalon IRR to GNWT IR 8). Previously delivered programs, by these organizations were funded in part through the Aboriginal Skills and Employment Partnership, but this federal funding program ended in March 2012. It is unclear how Avalon will achieve its goals without federal funding, as no other sources of funds were identified in the DAR to support apprenticeships, scholarships or other training. The Avalon Corporate Sustainability Report references Avalon donation policy that is

designed to support various local social and cultural activities. However, specific outreach, educational supports or promotional activities in the RSA communities that encourage students to stay in school, or pursue careers or trades, appear to be very limited.

Recommendation #8:

The GNWT recommends Avalon:

- a. Complete the Human Resources Management Plan and associated policies, strategies and programs for each phase of the Project.
- b. Continue to inform and work with the GNWT and other organizations to plan, design and co-ordinate the delivery of education, pre-employment and on-the-job training, skill development, professional development and other related programs and services that support and inform employment and northern labour market development.
- c. Provide details in the Human Resources Management Plan that include orientation, development and recruitment plans that expand upon references in the DAR to pre-employment and on-the-job training, significant support for apprentices, and other policies and practices that will maximize opportunities for northerners to fill potential positions.
- d. Complete detailed job descriptions and make the information available to the GNWT.
- e. Provide further details regarding outreach and promotional activities in support of communities, community members, students and apprentices.

6.3. Closure

The Project is estimated to have a 20 year mine life. Avalon thoroughly outlines principles, activities and mitigation measures to address the potential effects of a future temporary or permanent mine closure (Avalon IRR to GNWT IR 4). Avalon also commits to “include socio-economic matters in its plans dealing with closure” (GNWT-Avalon Meeting Minutes, December 7, 2011). The GNWT notes that the annual planned temporary closure at the hydrometallurgical plant each summer is “an operational component of the project and all options with respect to affected employees have yet to be determined” (GNWT-Avalon Meeting Minutes, August 1, 2011).

The NWT *Employment Standards Act* requires employers to notify the GNWT in the event of a permanent lay-off of 25 or more employees. However, there is no provision to notify the GNWT in the event of a temporary lay-off that may impact the preparedness of the GNWT to respond to increased demand for additional supports and services.

Recommendation #9:

The GNWT recommends Avalon:

- a. Provide notification to the GNWT in the event of temporary layoff of Avalon employees and the employees of its contractors and subcontractors.
- b. Work with the GNWT to ease employee transition to new jobs upon Project closure.

6.4. Compliance with the *Public Health Act*

The NWT *Public Health Act* provides legislation that outlines the responsibilities of developers in relation to public health. Topics include, for example, water quality, food establishment requirements, duty to report communicable diseases and the authority of the Chief Public Health Officer. This legislation provides for the public health of Avalon employees, and the employees of its contractors and subcontractors, as well as for the public as a whole.

Recommendation #10:

The GNWT recommends Avalon comply with all applicable sections of the NWT *Public Health Act*.

6.5. Employee Wellness and Support for Mental Health, and Drug and Alcohol Abuse

Avalon states they will provide support consistent with its company policies in dealing with personal health and well-being issues (DAR section 7.2.6). However, Avalon does not define these policies. The GNWT recognizes the Avalon commitment to provide employees and immediate family members an Employee Assistance Program (EAP), as well as the Avalon commitment to an alcohol-free/dry-camp (DAR section 7.2.3 and 7.2.14). Avalon acknowledges that drug and alcohol abuse will likely cause adverse effects for their employees; however, they expect to defer the issue to social service authorities (DAR section 7.2.3).

Recommendation #11:

The GNWT recommends Avalon:

- a. Clarify the services that will be offered in the EAP.
- b. Provide EAP usage data to monitor program usage, gauge EAP effectiveness and identify if gaps in GNWT services may exist.
- c. Clarify how Avalon will enforce the alcohol-free/dry-camp policy.

- d. Collaborate with GNWT social services and carryout on-site alcohol and drug prevention and awareness services for their employees.
- e. Carryout, from time to time, on-site programs aimed to address alcohol and substance issues.
- f. Provide on-site information regarding the existence of support services available to encourage full use of such services while off-site.

6.6. Health Eating Choices

Avalon commits to provide healthy food options for employees, particularly for those employees with or at risk of developing diabetes (GNWT-Avalon Meeting Minutes, November 5, 2012).

Recommendation #12:

The GNWT recommends Avalon:

- a. Collaborate with GNWT in defining “healthy food options” that are suitable for employees with or at risk of developing diabetes; and
- b. Collaborate with GNWT to develop a mutually acceptable way to measure the success of providing healthy food options.

6.7. NWT Purchases

The GNWT recognizes the benefits of bringing the hydrometallurgical facility to the South Slave Region. The opportunity to build and operate a processing facility in the NWT provides a greater opportunity to realize and maximize NWT benefits from a non-renewable resource development. It is estimated that the South Slave Region could see annual benefits from the Project between \$37.7 to \$53.8 million, of which an estimated \$8 million would be wages. Services to the hydrometallurgical facility in the South Slave Region could conceivably represent an additional \$10.6 million. This development could also help realize broader objectives such as: ensuring new investment in the NWT, diversifying the NWT economy, establishing a non-precious metal secondary processing industry in the NWT, facilitating economic growth in the South Slave Region, and maximizing NWT economic opportunities.

In recognition of these benefits however, the GNWT has identified the need for some outstanding information with respect to NWT purchases. Under the Terms of Reference (K1.8),

Avalon is to provide “an estimate of all contractor and subcontractor goods and services that the [P]roject will require, by [P]roject phase, as well as an estimate of what percentage of required goods and services can feasibly be sourced from local and regional businesses”. Avalon predicts that \$220 million (or 25%) of \$875 million in total purchases for the construction phase will be with NWT-based businesses (DAR Appendix K, Exhibit 2).

Avalon predicts that \$1 billion (or 39%) of \$2.6 billion in total purchases for the operations phase will be with NWT-based businesses (DAR Appendix K, Exhibit 2). Avalon further clarified in IRRs that if it included fuel purchases in total purchases from NWT-based business during the operations phase, the percentage would increase to 49% (Avalon IRR to GNWT IR 2.1). Avalon also estimates that, if reagents for the hydrometallurgical facility could be sourced from the South Slave Region, this would increase total NWT procurement during operations to 50%.

Avalon explained the majority of its purchases for the operations phase will be made outside the NWT because of the “unique requirements of rare earth processing” and the customized nature of goods and services required for the Project (Avalon IRR to GNWT IR 2). Avalon also explained that “one would expect the local NWT sourcing of diamond mines, which are much larger ventures, to be greater than for the Thor Lake project” (Avalon IRR to GNWT IR 2.1). However, Avalon still remains a very significant and major project in the NWT when considering the value of the resources, amount of purchases to be made, as well as the estimated (and potential) life of the Project.

Further, no prediction is made for the total goods and services that will be purchased during closure and reclamation phases of the Project. Nor is there any prediction made for the total goods and services that will be purchased from NWT-based businesses during these same phases.

Recommendation #13:

The GNWT recommends Avalon:

- a. Provide an estimate of the total goods and services required for closure and reclamation phases of the Project.
- b. Provide a percentage estimate of goods and services that will be purchased from NWT-based businesses during closure and reclamation phases of the Project.
- c. Provide a list of services required for construction and operation phases of the mine and hydrometallurgical facility.
- d. Expand the scope of NWT purchases to include the closure and reclamation phase, as well as work with the GNWT and local businesses to maximize NWT

procurement throughout the life of the Project.

6.8. NWT Business Development

Under the Terms of Reference (K9, K10), Avalon is to list the policies, plans and commitments that it will use to maximize contracts to Aboriginal and NWT-owned businesses, with emphasis on assisting business development initiatives and joint ventures. Avalon is also to provide an assessment of any barriers to maximizing the utilization of NWT businesses.

Avalon stated that its procurement priorities for the Project will be:

1. Impacted Aboriginal businesses;
2. NWT businesses; and then
3. Businesses outside the NWT.

To support this order of priority, Avalon has presented some encouraging information with respect to business development in the NWT and committed to do the following:

- Proactively seek out companies with the capacity to deliver goods or services. Avalon will give first priority to Aboriginal businesses within the impacted area, and will also use the GNWT Business Registry as secondary source for business listing. These practices will continue for the life of the Project.
- Provide priority to Aboriginal businesses from the impacted areas in its tender process.
- Assist NWT business in the establishment of partnerships and joint ventures. This assistance will include:
 - o Introducing companies with similar or compatible business objectives; and
 - o Facilitating communication between companies that could supply Avalon with goods and services (Avalon-GNWT Meeting Minutes, August 1, 2012).

Avalon has been in communication with the Department of Industry, Tourism and Investment, GNWT, in the South Slave Region to identify possible business opportunities and joint ventures that could service the hydrometallurgical facility.

Avalon has stated that the Engineering, Procurement, Construction and Management (EPCM) contractor will be the primary source of assistance to Avalon during the construction phase (Avalon IRR to GNWT IR 2.4). The EPCM contractor will be required to follow Avalon business commitments such as:

- Aboriginal and northern business procurement priorities;
- Providing business opportunities forecast;

- Supporting business to access commercial capital, and to facilitate subcontracting opportunities and joint ventures;
- Prequalifying NWT suppliers for goods and services; and
- Breaking up larger contracts to facilitate local business capacity and growth (Avalon IRR to GNWT IR 2.4).

Avalon has also indicated they will ensure internal mechanisms will be in place to monitor, oversee and enforce contractor compliance with respect to hiring and reporting (Avalon-GNWT Meeting Minutes, August 1, 2012).

This information is encouraging; however, it remains unclear if all Avalon business commitments will be adhered to by all contractors.

When GNWT met with Avalon in August 2012, Avalon stated it was still committed to develop a northern business strategy but that it is not available this early in the Project development. The GNWT would like the opportunity to review the completed strategy and work collaboratively with Avalon on areas of benefit to the NWT business community.

The GNWT recognizes that processing rare earth metals is highly complicated, takes a great deal of time and expertise, and requires highly specialized and expensive equipment. Avalon has confirmed it will continue to give preference to purchase materials and services in the NWT, including those identified as specialized, where it is feasible to do so (Avalon IRR to GNWT IR 2.5). The GNWT views this as an opportunity for Avalon to work with the GNWT and NWT business community to fill gaps in both the non-specialized and specialized sector, which will help build business capacity in the north. The GNWT would like to build on the business development work occurring in the South Slave Region. The GNWT would like to work with Avalon and the NWT business community to review the goods and services required for the mine site and hydrometallurgical facility, to facilitate where feasible, the development of non-specialized, as well as rare earth specialized, NWT business capacity.

Recommendation #14:

The GNWT recommends Avalon:

- a. Provide a list of goods and services required to operate the Project mine site and hydrometallurgical facility.
- b. Provide an NWT-specific Business Development Strategy for the Project that:
 - i. Includes adaptive management measures;
 - ii. Confirms contractor and subcontractor adherence to procurement and hiring priorities, and business development commitments; and

- iii. Details how this adherence requirement will be implemented.

Recommendation #15:

The GNWT recommends Avalon collaborate with the GNWT:

- a. To identify what services (both specialized and non-specialized) are required for rare earth production at the Project mine site and hydrometallurgical facility.
- b. To finalize a Northern Business Development Strategy.
- c. In the finalization of all NWT business commitments.

6.9. Traditional Economy

The NWT is rich in its traditional economy and boasts some of the most sought-after furs. There are several trappers in the RSA whose livelihoods depend, at least in part, on the traditional economy. The GNWT is encouraged that Avalon has a working relationship with local trappers and is aware of trap lines in the area. Avalon commits to continue working with local trappers and ensure they have unrestricted access to their lines (Avalon-GNWT Meeting Minutes, August 1, 2012). Avalon has also committed to accommodating NWT fishers at the loading dock on the South Slave shore.

Recommendation #16:

The GNWT recommends Avalon continue, throughout the life of the Project, to:

- a. Maintain a working relationship with local trappers and fishers.
- b. Accommodate and address the need of local trappers and fishers.

6.10. Tourism

The development of the NWT tourism industry is a key component to the diversification of the NWT economy. Tourism is a critical foundation to grow and strengthen the NWT economy, and it is built upon the livelihoods of individual operators.

Avalon has made several commitments to ensure impact on tourism is minimized. These commitments include: reducing noise and light emissions from Thor Lake Property (DAR, p. 853, 870), minimizing visual and auditory impacts around the docks (Avalon Deficiency Statement part 2B), as well around the mine site (DAR, p. 820).

Recommendation #17:

The GNWT recommends Avalon, throughout the life of the Project, to:

- a. Develop and maintain a working relationship with all tourist operators in the vicinity of the Project mine site and hydrometallurgical facility.
- b. Work with tourist operators to address the potential business impacts from Project-related infrastructure including the loading docks and barging activity across the Great Slave Lake.

6.11. Monitoring and Follow Up

Public reporting is key to understanding the accuracy of a project's EA. It is also important for determining potential adverse effects and enabling mitigation measures to be adjusted when necessary. The GNWT uses reporting information published by developers in the NWT to monitor and interpret the accuracy of EAs and whether the socio-economic wellbeing of northerners is protected.

It is important that monitoring and reporting programs are designed in a way to test predictions made by developers; assess the effectiveness of mitigation and support adaptive mitigation; remain in place for the life of the project; and support and contribute to information on cumulative effects at a regional and territorial scale.

Avalon has committed to report publicly on a number of indicators that include:

- Total person-year employment by skill category;
- Total person-year employment by hiring priority and skill category;
- Northern employment in person years by NWT community of residence;
- Northern hiring by community of residence;
- Number of NWT resident employees who resigned or who were laid off, fired or otherwise terminated in the previous year;
- Participation in and results of training activities; and
- Advancement and promotion of northerners, including Aboriginal northerners (Avalon-GNWT meeting minutes, August 1, 2012).

In addition to the indicators committed to by Avalon, it is accepted practice for developers in the NWT to collect and annually report several other socio-economic indicators to the GNWT and the public. As noted in the meeting minutes, there are two indicators that remain outstanding and the GNWT recommends these be publically reported on annually by Avalon. Avalon has committed to working with the GNWT toward the negotiation of a SEA, at which

time it is expected discussions for outstanding indicators will take place. However, for the purpose of this technical report, the GNWT would like to reiterate the importance of consistent reporting among all developers in the NWT to ensure effective monitoring of the socio-economic well-being of NWT residents.

Recommendation #18:

The GNWT recommends Avalon:

- a. In addition to the above indicators, to report publically and annually on the following:
 - i. Gross value of goods and services purchased during the calendar year by major category or purchase in relation to each phase of the project. (“Purchases” based on the gross value of all purchases of goods and services including both goods and services produced in the NWT and goods and services produced outside the NWT that are purchased through NWT businesses); and
 - ii. Business opportunities forecast and assessment for the upcoming year.
- b. Provide its reported results each year and distribute a copy of the report to both GNWT and affected communities.

Due to the inherent difficulty in predicting and assessing socio-economic effects, there should be emphasis for a follow-up program. This program should focus on adaptive management processes where relevant monitoring can help to continually refine mitigation measures to maximize project benefits and minimize project impacts on the socio-economic environment. The GNWT advanced the idea of a formal follow-up program in the form of a SEA throughout this EA, and as stated above, Avalon has committed to negotiating a SEA with the GNWT in the near future.

Under section 117(3)(c) of the *MVRMA*, a Panel is required, in the determination of a project, to consider the need for any follow-up program, including the requirements of such a program. The *MVRMA* also states under section 117(2)(e) that MVEIRB may include, in consideration of the development, any other matter determined to be relevant. The GNWT views these sections of the *MVRMA* to be consistent with a requirement for a follow-up program, as defined in the *MVRMA*, when warranted. This is consistent with GNWT interpretation of similar provisions negotiated since 1998.

It is GNWT position that SEAs are best implemented as a follow-up program to EAs or Environmental Impact Reviews (EIRs).² Such an agreement with Avalon would confirm and formally recognize its socio-economic commitments related to the Project and provide for ongoing monitoring and adaptive management with respect to Project-related socio-economic issues.

The negotiation of a SEA with Avalon for the Project is in accordance with GNWT Sustainable Development Policy.

Avalon has committed to discuss a SEA with the GNWT. The GNWT prefers completion of Impact and Benefit Agreements (IBAs) between Avalon and affected Aboriginal groups prior to engaging in SEA discussions with Avalon. It is important to note that IBAs are private contracts and, as such, the GNWT is not privy to the contents of such agreements. Additionally, IBAs are not directly linked to the EA, yet SEAs *are* directly linked to the EA: not as a mitigation measure, but rather as a follow-up program provided for by the sections of the *MVRMA* stated above. A negotiated SEA between the GNWT and Avalon would be consistent with, or complementary to, the provisions found within any private IBA or other similar agreement between Aboriginal groups and Avalon.

The GNWT views SEAs as an essential tool to: monitor and test socio-economic predictions; evaluate successes; identify gaps when predictions are not met, and; identify adaptive management measures to address unintended results. Ideally, the socio-economic commitments made by Avalon during the Project EA, including items for reporting, will be formalized in a SEA. In order to link the SEA to the EA, the GNWT recommends a socio-economic follow-up program, in the form of a SEA between the GNWT and Avalon, be a condition of project approval.

Recommendation #19:

The GNWT recommends MVEIRB, as a condition of Project approval, include the following requirement in its Report of Environmental Assessment for the Project: “Avalon and GNWT shall negotiate and sign a follow-up program in the form of a Socio-Economic Agreement.”

² As stated in *MVRMA*, Part 5, Section 111, Definitions, “follow-up program” means a program for evaluating:
(a) the soundness of an environmental assessment or environmental impact review of a proposal for a development; and
(b) the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal.

7. References

Department of Environment and Natural Resources. (August 2011). GNWT 2011-2015 Barren-ground Caribou Management Strategy for the NWT. Retrieved from the Government of the Northwest Territories website: http://www.enr.gov.nt.ca/_live/documents/content/2011-2015_Barrenground_Caribou_Management_Strategy.pdf

Department of Environment and Natural Resources. (2010). Action Plan for Boreal Woodland Caribou Conservation in the Northwest Territories 2010-2015. Retrieved from the Government of the Northwest Territories website: [http://www.enr.gov.nt.ca/_live/documents/content/Boreal%20Caribou%20Action%20Plan%202010-1015%20\(FINAL\).pdf](http://www.enr.gov.nt.ca/_live/documents/content/Boreal%20Caribou%20Action%20Plan%202010-1015%20(FINAL).pdf)

Department of Environment and Natural Resources. (2011). Northwest Territories Species at Risk Committee (SARC). Retrieved from Government of the Northwest Territories Species at Risk website: <http://nwtspeciesatrisk.ca/tiki/tiki-index.php?page=SARC>

Department of Environment and Natural Resources. (July 2012). 2012-2017 Species Status Assessment Schedule Released. Retrieved from Government of the Northwest Territories Species at Risk website: <http://news.exec.gov.nt.ca/2012-2017-species-status-assessment-schedule-released/>

Environment Canada. 2010. Technical Document for Batch Waste Incineration. Retrieved from the Environment Canada website: <http://www.ec.gc.ca/gdd-mw/F53EDE13-1D01-4D05-B97D-1F3818D28657/Technical%20Doc%20for%20Batch%20Waste%20Incineration.2010.pdf>

Environment Canada. 2012. Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. *Species at Risk Act Recovery Strategy Series*. Environment Canada, Ottawa.

Government of Canada. (2012). The National Recovery Strategy for the Woodland Caribou, Boreal Population, in Canada (the Recovery Strategy) Retrieved from the Government of Canada Species at Risk Registry website: http://www.sararegistry.gc.ca/document/default_e.cfm?documentID=2253

Mackenzie Valley Review Boards Public Registry, Avalon Rare Metals Inc. (2012). Retrieved from Mackenzie Valley Review Board website: http://reviewboard.ca/registry/project.php?project_id=72

Rescan. 2012. Joint Regional Grizzly Bear DNA Proposal, 2012. Prepared for BHP Billiton Canada Inc., De Beers Canada Inc., and Rio Tinto Canada. Vancouver, BC.