

March 19, 2013

VIA EMAIL

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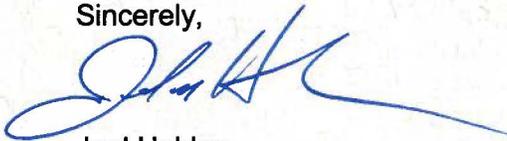
Dear Mr. Hubert,

**RE: Government of the Northwest Territories Final Written Submission for  
EA1011-001 Thor Lake Rare Earth Element Project,  
Avalon Rare Metals Incorporated**

Attached to this cover letter is the Government of the Northwest Territories Final Written Submission 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 for this project.

If you may require any further details, please contact Shafic Khouri, Environmental Assessment Analyst, at [shafic\\_khouri@gov.nt.ca](mailto:shafic_khouri@gov.nt.ca) or (867) 873-7905.

Sincerely,



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

Attachment

Government of the Northwest Territories

# Thor Lake Rare Earth Element Project Environmental Assessment (EA1011-001)

Final Written Submission

March 2013



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## Abbreviations and Acronyms

AQMMP	Air Quality Monitoring and Management Plan
Avalon	Avalon Rare Metals Incorporated
CEA	Cumulative Effects Assessment
CERF	Cumulative Effects Response Framework
EA	Environmental Assessment
GNWT	Government of the Northwest Territories
IMP	Incineration Management Plan
IR	Information Request
IRR	Information Request Response
LSA	Local Study Area
LUP	Land Use Permit
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
<i>MVRMA</i>	<i>Mackenzie Valley Resource Management Act</i>
PDA	Project Development Area
PRI	Public Registry Item
RSA	Regional Study Area
SEA	Socio-Economic Agreement
SOP	Standard Operating Procedures
Project	Thor Lake Rare Earth Element Project
PSRF	Project-Specific Response Framework
PWNHC	Prince of Wales Northern Heritage Centre
VEC	Valued Ecosystem Component
WEMP	Wildlife Effects and Monitoring Program
WEMMP	Wildlife Effects Monitoring and Management Plan
WL	Water License
WWHPP	Wildlife and Wildlife Habitat Protection Plan (titled as a WEMMP by Avalon)

## **1 Introduction**

The Government of the Northwest Territories (GNWT) actively participated throughout the Avalon Rare Metals Incorporated (Avalon) Thor Lake Rare Earth Element Project (the Project) Environmental Assessment (EA). The GNWT submitted Information Requests (IRs) and Responses (IRRs); a Technical Report; and presented at the Public Hearing. GNWT and Avalon officials met throughout the EA process to discuss concerns related to the Project and to develop mitigation and remedial measures. Summaries of these discussions and agreed-upon commitments can be found on the Mackenzie Valley Environmental Impact Review Board (MVEIRB) public registry for the Project.

This is the GNWT Final Written Submission for the Project EA (EA1011-001).

## **2 Wildlife**

### **2.1 Wildlife and Wildlife Habitat Protection Plan**

The purpose of a Wildlife and Wildlife Habitat Protection Plan (WWHPP) has been described by the GNWT in a previous submission (p.7, GNWT Technical Report, Public Registry Item [PRI] #225) and during the Public Hearing. This description is provided as reference again in Appendix A of this submission.

On January 12, 2012, the GNWT requested various Project details on wildlife and wildlife habitat protection measures (GNWT IR #14 and #15, PRI#131). Avalon submitted a conceptual Wildlife Effects Monitoring and Management Plan about a month later (Avalon IRR to GNWT IR #14 and #15, PRI#147). The GNWT recommended Avalon rename its conceptual Wildlife Effects Monitoring and Management Plan to a WWHPP for reasons previously mentioned (p.6, GNWT Technical Report, PRI#225). Avalon agreed to this renaming during a meeting on January 24, 2013 (PRI#281). The conceptual plan provided by Avalon will herein be referred to as a conceptual WWHPP in this submission.

The conceptual WWHPP presented by Avalon was reviewed by GNWT wildlife staff to determine its consistency with the guideline description of a WWHPP (i.e. Appendix A). The GNWT was pleased Avalon took steps to develop a conceptual WWHPP. The WWHPP, however, did not satisfy GNWT reviewers and did not provide all the GNWT requested details for a WWHPP (GNWT IR #14 and #15, PRI#131), particularly as they related to boreal and barren-ground caribou, moose, species at risk and other Valued Ecosystem Components (VECs).

As such, continued development of the WWHPP is still needed to fully resolve GNWT issues related to wildlife and wildlife habitat.

Avalon has committed to work with the GNWT and other relevant parties in the development of the WWHPP with the goal of producing an endorsed final plan 90 days preceding construction at the Nechalacho Mine and Hydrometallurgical Plant site areas for the Project (p.18, Avalon Project Commitment Table, August 23, 2012, PRI#188).

For the reasons detailed in the two previous paragraphs, the GNWT expects outstanding concerns with the Project WWHPP will be addressed. Given the progress made to date by Avalon and through its commitment to continue working with partners, the GNWT is confident Avalon can produce a Project WWHPP consistent with the GNWT guideline description found in Appendix A.

## **2.2 Wildlife Effects Monitoring Program**

The primary purpose of a Wildlife Effects Monitoring Program (WEMP) is to test the predictions made by a developer about its Project's potential impacts on wildlife and wildlife habitat during the Project EA. The WEMP can also test the effectiveness of mitigations designed to minimize or negate Project impacts. As a standard practice, the GNWT is requesting all Projects going through the EA process to develop a WEMP. This is a proactive measure to ensure Project impacts, if they exist, are captured and mitigated through a follow up adaptive management program (see Section 2.3). A WEMP guideline description, provided previously in the GNWT Technical Report, can be found in Appendix B of this submission.

The GNWT advised Avalon during a meeting on January 24, 2013 that a Project WEMP is needed to test Project predictions and the effectiveness of mitigation measures (GNWT-Avalon Meeting Record, PRI#281). Avalon committed to a general principle of collaborating with the GNWT, affected Aboriginal organizations, co-management authorities and any other affected parties in the development and on-going review of a potential WEMP. Avalon committed to continued discussions with the GNWT about wildlife monitoring. However, Avalon did not commit to developing a WEMP for the Project.

The GNWT and Avalon met again on January 29, 2013 to further discuss the content of a potential WEMP. The GNWT has provided Avalon with reference materials that could be used to develop a Project WEMP. This includes other project WEMP examples, guideline definitions and a list of Project-recommended species to include in the WEMP (namely, barren-ground

caribou, boreal caribou and moose). Additional species may need to be included in the WEMP, depending on their VEC status and/or if they are a species at risk. The GNWT has publicly stated through its evidence provided during the EA process that Avalon is responsible for developing the WEMP. The GNWT is willing to work closely with Avalon to provide additional guidance and review, as appropriate. This is in addition to the standard review and input the GNWT provides for any project WEMP.

Currently, the *primary* way a developer may feed into a VEC or region-specific cumulative effects assessment (CEA) is by developing a WEMP for its project. This potential link for contributions is highlighted in Figure 2, Section 3.1. During the Public Hearing, Avalon,

“[...]committed to working with the GNWT and [...]Aboriginal partners on a program of cumulative effects that make sense for [the Project], and has meaningful impact, or meaningful information for those communities, as well as for Avalon[,]” (p.254, February 18, 2013, Public Hearing Transcript, PRI#286).

The GNWT asserts the primary conduit for Avalon to fulfill this commitment is through the collaborative process of it developing a Project WEMP. To date, Avalon has not committed to develop this WEMP. This is an outstanding concern for the GNWT and the following recommendation is made to address this concern:

**Recommendation #1:**

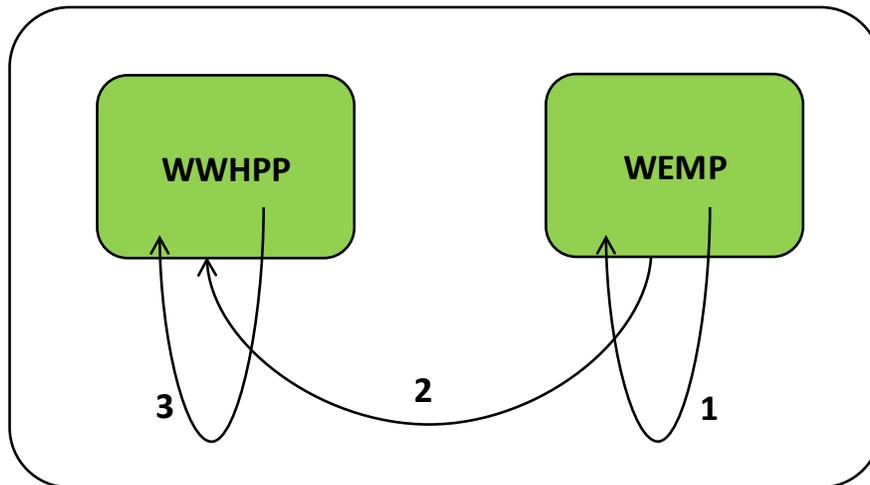
The GNWT recommends to MVEIRB that Avalon develop a WEMP as a follow-up program for the Project.

## 2.3 Project-Specific Response Framework for Wildlife Effects

Figure 1 details the GNWT’s current conception of the Project-Specific Response Framework (PSRF) for the monitoring, management and mitigation of Project impacts on wildlife and wildlife habitat. A WWHPP and a WEMP are needed for the PSRF to be effective (see GNWT Recommendation #1).

The PSRF is composed of three feedback mechanisms to ensure project-specific wildlife monitoring, management and mitigation uses adaptive management principles. These mechanisms are depicted in Figure 1. The arrows in this figure correspond with the following explanation:

- Arrow 1: Results from a WEMP may trigger changes in the monitoring programs that are part of that WEMP (i.e., a project may not be monitoring correctly to test its predictions);
- Arrow 2: Results from a WEMP may trigger changes to the mitigation and/or management measures contained in a WWHPP; and,
- Arrow 3: Results from any WWHPP-derived local-scale monitoring may trigger changes in management and/or mitigation measures contained within this same plan.



**Figure 1:** Depiction of adaptive management feedback mechanisms between a WWHPP and a WEMP. These feedback mechanisms create project-level responses in monitoring, management and mitigation.

### 3 Cumulative Effects on Wildlife

GNWT concern with the Project contribution to cumulative effects on wildlife has been identified in previous GNWT written submissions (p.8-10, GNWT Technical Report, PRI#225) and during the Public Hearing (p.23-26 and 153-154, February 20, 2013, Public Hearing Transcript, PRI#288). Specific concerns related to cumulative impacts on the Bathurst barren-ground caribou herd and boreal caribou have also been identified by MVEIRB and other parties.

As mentioned in Section 2.2, while the primary purpose of a WEMP is to test Project predictions and mitigations, it may also contribute to CEA and management. For example, if a WEMP tests

predictions about project impacts on wildlife distribution and abundance around a project using standardized protocols, then the Project WEMP may yield information that can be used to help track population trends at a larger scale (e.g., the Slave Geological Province or within the historic Bathurst range). This type of information can feed into a CEA. For this reason, the GNWT advocates for a WEMP (see Recommendation #1). A diagram and discussion of how the WEMP may fit into the larger picture of CEA and management is provided in Section 3.1.

Information from multiple programs, including WEMPs, feed into larger-scale monitoring, assessment and management processes. This includes current GNWT monitoring programs (e.g., programs that track population status and trends of barren-ground caribou, moose and boreal caribou); applicable studies conducted by other parties (e.g., traditional knowledge research on long-term distribution patterns); and, future programs that may include the monitoring of environmental factors (e.g., vegetation change, fire regime and climate data).

Management of cumulative effects requires agreement on the value of the landscape, its ecological component, and the limits of acceptable change. Cumulative effects monitoring, assessment and management of various species, such as barren-ground caribou, remains a work in progress. CEA must be conducted at a scale appropriate to the species or region of interest. It needs to be addressed collaboratively because it is a shared responsibility and there are many contributors to cumulative effects. Consequently, while the GNWT has agreed to take a lead role in facilitating this task, monitoring, CEA and cumulative effects management is a multiparty process.

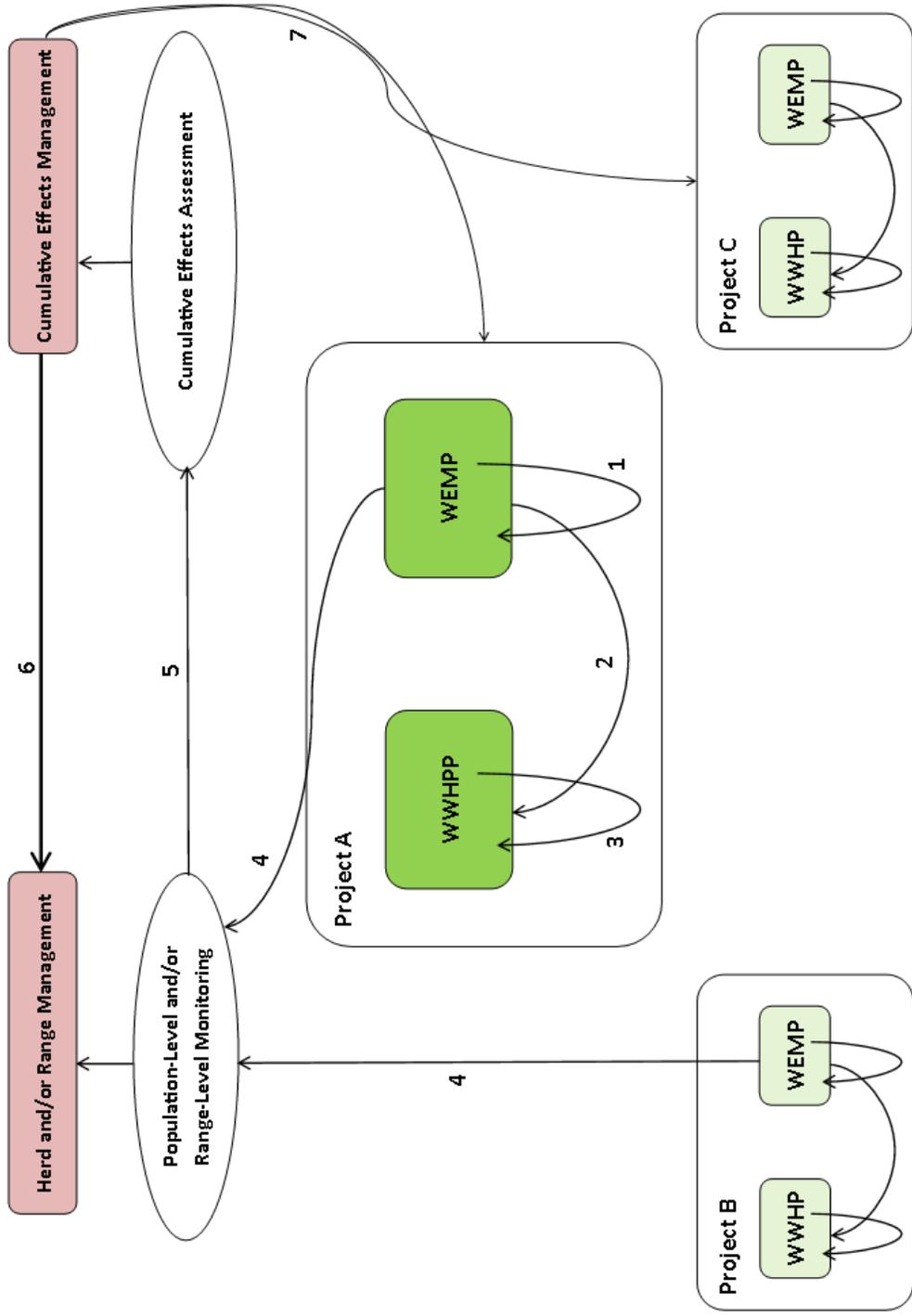
### **3.1 Cumulative Effects Response Framework**

The GNWT maintains that cumulative effects monitoring, assessment and management must be carried out on a VEC or region-specific basis rather than on a project-specific basis. Figure 2 details the GNWT's current conception of the Cumulative Effects Response Framework (CERF) for cumulative effects monitoring, assessment and management. Arrow connections in this figure correspond with the following explanation:

Arrow 1-3: These are the mechanisms described in the PSRF (Figure 1). The PSRF comprises part of the CERF;

Arrow 4: Results from project WEMPs contribute to multiple scales of monitoring, including population and/or range-level monitoring; and through this;

- Arrow 5: Results from population and/or range-level monitoring can contribute to CEA, along with complementary studies on other species-applicable cumulative effects factors (not shown). CEA informs cumulative effects management;
- Arrow 6: To address cumulative effects at the scale appropriate to the species of interest: Herd and/or range management is influenced by cumulative effects management (e.g., implementation of the thresholds for disturbance described in the national Recovery Strategy for Woodland Caribou, Boreal Population, in Canada);
- Arrow 7: To address cumulative effects at the scale of the project: Cumulative effects management can result in changes to project-level monitoring (e.g. through the WEMP) and mitigation (e.g. through the WWHPP) by emphasizing the use of best practices. It is through best practices that a developer can reduce its own individual contribution to cumulative effects on wildlife and wildlife habitat. The GNWT and other co-management partners can work with developers to identify and implement best practices.



**Figure 2:** Depiction of a Cumulative Effects Response Framework (CERF) for cumulative effects monitoring, assessment and management.

## 4 Atmospheric Environment

The GNWT has participated throughout the EA review and assessment of the Project air quality component. Avalon conducted an air quality assessment that included emission inventories, dispersion and deposition modeling for both sites of the Project and sections relating to a dust control plan and an air quality monitoring plan. The GNWT reviewed each of these components and presented its queries and concerns (GNWT IR #18-29, PRI#131; p.19-49, August 15, 2012, Technical Session Transcript, PRI#183).

Avalon has committed to consult with two technical air experts – the GNWT and Environment Canada – in the development of the Air Quality Monitoring and Management Plan (AQMMP) and the Incineration Management Plan (IMP) for the Project (p.1, Avalon Project Commitment Table, August 23, 2012, PRI#188).

The GNWT expects the outstanding aspects of what it believes should be included in the AQMMP to be addressed through the above-mentioned Avalon commitment to consult with technical air experts (p.3-4, GNWT Technical Report, PRI#225; p.18-21, February 20, 2013, Public Hearing Transcript, PRI#288).

As it pertains to the IMP, however, the GNWT has identified, and debated with Avalon, throughout the EA process on an outstanding concern related to stack testing in the IMP (see reference above for IRs, Technical Sessions, Technical Report and Public Hearing). A specific GNWT recommendation already provided to Avalon would address this concern. The GNWT has also substantiated this recommendation upon request by MVEIRB staff through email correspondence posted to the Project public registry (January 8, 2013, “Email from GNWT Regarding Air Quality,” PRI#250). GNWT position was also summarized and its recommendation was reiterated during the Public Hearing.

The GNWT has recommended to Avalon that the Project IMP include stack testing of the incinerator following commissioning and periodically thereafter. Despite multiple exchanges of dialogue throughout the EA process between Avalon and the GNWT, and between Avalon and other air-quality technical experts (i.e. Environment Canada), Avalon has yet to commit to these stack testing protocols for the Project IMP.

This is an outstanding concern for the GNWT and the following recommendation is made to address this concern:

**Recommendation #2:**

The GNWT recommends to MVEIRB that Avalon implement protocols for stack testing of the incinerator following commissioning and periodically thereafter in the Project IMP.

The GNWT recognizes this measure could be captured in the Mackenzie Valley Land and Water Board (MVLWB) process during the regulatory phase of the Project. This recognition is based on several instances of terms and conditions related to incineration being found in past land use permits and/or water licenses (see Appendix C). The GNWT also recognizes incineration as a waste management issue that could be covered under section 26(1) of the *Mackenzie Valley Land Use Regulations*, whereby the Land and Water Boards can include terms and conditions in a permit respecting:

- Clause (c) the type and size of equipment that may be used in the land-use operation,
- Clause (d) the methods and techniques to be employed by the permittee in carrying out the land-use operation,
- Clause (i) “the storage, handling and disposal of refuse or sewage.”

## 5 Archaeology

In November 2012, the Prince of Wales Northern Heritage Centre (PWNHC) highlighted outstanding archaeological concerns related to the Project and provided two recommendations to Avalon (p.4-5, GNWT Technical Report, PRI#225).

Since the Technical Report phase, Avalon has provided the PWNHC with the “Archaeological Investigation in 2012 at the Thor Lake Project: Northwest Territories Final Permit Report” for the Northwest Territories Archaeologists Permit (#2012-005). The information in the report addressed PWNHC outstanding concerns in GNWT Technical Report Recommendation #2.

The PWNHC also identified outstanding concerns related to the Project Archaeological Sites Protection Plan in GNWT Technical Report Recommendation #3. In response, Avalon agreed to add its commitment to develop an Archaeological Sites Protection Plan to the Project EA commitment table (p.3, Avalon Response to Technical Reports, PRI#227) and this has been completed (p.7, Avalon Project Commitment Table, March 12, 2013, PRI#297). The PWNHC

expects any outstanding concerns related to the Archaeological Sites Protection Plan will be addressed through this Avalon commitment.

The PWNHC, therefore, has no outstanding archaeological concerns with the Project.

## **6 Environmental Monitoring**

Land and water boards, governments and industry have made progress toward establishing best practices for managing environmental effects in the North. The GNWT believes the primary authority to ensure environmental monitoring and reporting for a project are land and water boards through the issuance of Land Use Permits, Water Licences and other authorizations. In accordance with its mandate, the GNWT reviews and comments, as necessary, on the terms and conditions of licenses and permits for projects prior to their issuance. After issuance by a land and water board, the GNWT continues to provide comments, upon request of the regulator, on project plans and reports as required by the terms and conditions.

For some other matters involving environmental monitoring, such as species at risk, regional scale monitoring by co-management authorities is also required.

The GNWT believes any additional communication on environmental monitoring for a project is best achieved through agreement between affected communities and the developer.

## **7 Socio-Economics**

The proposed Project is a large and long term project with significant employment and business opportunities for Northwest Territories residents. Experience has shown non-renewable resource development leads to both positive and negative significant socio-economic impacts in the Northwest Territories. The GNWT maintains there will be a risk of significant adverse socio-economic impacts from the Project without appropriate mitigation measures in place. The GNWT also maintains significant beneficial socio-economic impacts from the Project would not be realized without appropriate mitigation measures in place.

Avalon has made numerous commitments to mitigate both potential adverse impacts and realize potential beneficial impacts. However, without a follow-up program to formalize these commitments, there is a significant risk they will not be implemented. The only method to ensure these obligations are fulfilled, and to adapt to observed impacts, is through the

establishment of a follow-up program in the form of a socio-economic agreement. For these reasons, the GNWT sees the need for a socio-economic follow-up program.

Section 117(2)(e) of the *Mackenzie Valley Resource Management Act (MVRMA)* requires the MVEIRB to include, in consideration of a proposed development, any other matter determined to be relevant. The GNWT views this section of the *MVRMA* to be consistent with a requirement to consider the need for a follow-up program, as defined in the *MVRMA*, when warranted. This is consistent with GNWT interpretation of similar provisions since 1998.

It is the GNWT position that follow up programs to EAs are best implemented as SEAs. Such an agreement with Avalon would confirm and formally recognize its socio-economic commitments regarding the Project and provide for ongoing monitoring and adaptive management with respect to associated socio-economic issues. The negotiation of an SEA with Avalon for the Project is in accordance with GNWT Sustainable Development Policy. Therefore, 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.

A SEA with Avalon would confirm and formally recognize its socio-economic commitments for the Project and provide for ongoing monitoring and adaptive management with respect to Project-related socio-economic concerns. The GNWT advanced this position in its technical report dated November 29, 2012, and during the Public Hearings held between February 18 and 22, 2013.

In its technical report dated November 29, 2012, the GNWT highlighted its outstanding socio-economic concerns and made several recommendations. While some of these concerns have been addressed and documented on the public registry, others remain outstanding. The outstanding concerns include:

- Clarifying the monitoring and reporting of several socio-economic indicators;
- Cost of providing medical care for Avalon employees who are not residents of the Northwest Territories;
- Supporting alcohol and substance abuse programs; prevention and awareness programs on site; and the distribution of information about programs and services offered by the GNWT on site;
- Completing a Human Resources Management Plan that is expected to provide details regarding Avalon commitments to maximize northern workforce development and employment, and build capacity in the Regional Study Area (RSA). The plan would include job descriptions and the education and skills required for each position, career development and educational supports, trades

and apprenticeship opportunities, and other education, training, employment and recruitment strategies and initiatives;

- Providing an inventory of goods and services required for construction and operation of the Nechalacho mine site and hydrometallurgical facility in order ensure opportunity exists for Northwest Territories businesses;
- Providing a Northern Business Strategy that would detail business development opportunities and supports for northern businesses; and,
- Providing an estimate of the total goods and services (including a territorial percentage) being required for closure and reclamation phases.

If appropriate mitigation measures are not put in place to address the concerns listed above, there will be significant adverse socio-economic impacts and potential socio-economic benefits may not be realized.

Avalon has stated its willingness to discuss a SEA with the GNWT. The GNWT recognizes Avalon commitments toward transparency through its reporting of activity results. 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, allow for adaptive management to address unexpected impacts. Ideally, the socio-economic commitments made by Avalon throughout the EA will be formalized and the outstanding concerns listed above will be resolved and included as mitigation measures in the SEA.

Though negotiations have begun between the GNWT and Avalon, a final signed agreement is not expected before the closure of the Project public registry. Including a follow-up program in the form of a SEA as a measure in the report of EA will ensure the SEA between Avalon and the GNWT is negotiated and implemented in good faith for the life of the Project. There currently is no other legal mechanism requiring a SEA in the Northwest Territories. To formally link the SEA to the EA and ensure the socio-economic wellbeing of Northwest Territories residents is protected, 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 #3:**

The GNWT recommends, as a condition of project approval, the MVEIRB include the following requirement for a socio-economic follow-up program in its Report of Environmental Assessment under section 128(b)ii of the *MVRMA*:

“Avalon and the GNWT shall negotiate and sign a follow-up program in the form of a Socio-Economic Agreement.”

## 8 Conclusion

Overall, the GNWT believes Avalon can undertake the Project in a way that does not pose a significant adverse impact to the environment, provided Avalon commitments made during the Project EA and recommendations put forward by the GNWT during the EA are carried out.

## **Appendix A: Guideline for a Wildlife & Wildlife Habitat Protection Plan**

The WWHPP outlines the steps necessary to protect personnel, wildlife and wildlife habitat within the Project Development Area (PDA), also commonly described as a project’s direct “footprint.” A WWHPP documents the day-to-day standard operating procedures including mitigations, reporting, and best practices for the Project site.<sup>1</sup>

The WWHPP requires the development of clear protocols and standard operating procedures for project employees and contractors to ensure the implementation of site-specific mitigation. The WWHPP must include measures for compliance monitoring and reporting, 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 from 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).

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<sup>1</sup> The effectiveness of mitigation is tested in a project WEMP; see Appendix B.

## **Appendix B: Guideline for a Wildlife Effects Monitoring Program**

A WEMP encompasses effects monitoring at a Local Study Area (LSA) and RSA scale during the life of the project. In effect, it is a follow-up program as defined under the *MVRMA*. A follow-up program is meant to evaluate (1) the soundness of an EA or environmental impact review for a proposed development; and/or (2) the effectiveness of mitigation measures or remedial measures imposed as conditions of approval of the proposal.

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 effectiveness of impact predictions made by a developer during a project's EA or EIR, including mitigation techniques employed during the construction, operation, closure and post-closure phase of a 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 CEA, if appropriate. Results from a well-designed WEMP can also be used to inform best practices associated with future development projects in the Northwest Territories.

An effective WEMP should:

1. Be focused on key VECs and other species of importance that are typically found in or near the area surrounding the project;
2. Be conducted at a project LSA and/or project RSA scale that is appropriate to the proposed predictions for the project VEC;
3. Use tested standardized protocols/methods/approaches so that monitoring results can be combined at a regional scale;
4. Be developed and reviewed in collaboration with Aboriginal partners, government, regulatory agencies, and other interest groups including other mines; and,
5. Be developed such that monitoring and mitigation techniques can be revisited and revised pending new information (i.e., developed using an adaptive management framework).

## **Appendix C: Examples of Licenses and Permits Referencing Incineration**

The following are examples of terms and conditions found in existing Water Licenses (WLs) or Land Use Permits (LUPs) relating to incineration, including equipment requirements, performance standards, use of published guidance documents, and methods and techniques to be used.

### **Snap Lake LUP: MV2010D0053**

*Section 26(1)(i), item 54:*

“The Permittee shall select a unit that is capable of meeting an emission concentration limit of dioxins and furans of 80 pg TEQ/m<sup>3</sup>”

### **Tundra Mine LUP - MV2009XO019**

“39. The Permittee shall use a forced-air, fuel-fired incinerator to burn all combustible garbage except plastics daily.”

### **Tundra Mine Type A WL - MV2009L8-0008**

*Part D: Conditions Applying to Waste Disposal*

“D.38. The Licensee shall submit to the [Land and Water] Board for approval 45 days prior to incineration activities an incineration management plan that considers Environment Canada's "Technical Document for Batch Waste Incineration".

D.39. The Licensee shall revise and resubmit the plan required under Part D, item 38 if not approved by the [Land and Water] Board. The revised plan shall be submitted to the [Land and Water] Board at a time and in a form set out by the Board in a directive which will accompany such a rejection.”

### **Paramount Cameron Hills Type A WL - MV2010L1-0001**

*Schedule 3: Conditions Applying to Waste Disposal*

“1. The Waste Management Plan referred to in Part D, item 1 shall include, but not be limited to, the following:

i) A description of the incineration technologies being used including, but not limited to, the make, model and year of production of the incinerator(s) being used, the amount and type of Waste being burned, methods for determining Waste volumes, operations and maintenance records, and staff training details.

*Reasons for Decision - December 10, 2010*

Monitoring Related to Incineration Activities, Schedule 5, Item 1(a)(vi): While regulating air emissions is, generally, outside the jurisdiction of the MVLWB, the MVLWB may still set conditions in the Licence for the protection of water quality. Since the MVLWB accepts in principle that air emissions can lead to deposits of waste into water, the MVLWB decided potential impacts to water from incineration practices must be monitored under the Site-Wide Monitoring Program.”