

Mackenzie Valley Review Board



**Work Plan
for the
Environmental Assessment
of
Avalon Rare Metals Inc.'s
Thor Lake Rare Earth Element Project
EA1011-001**

August, 2011

Mackenzie Valley Review Board

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1 Introduction

This document is the work plan for the environmental assessment of Avalon Rare Metals Inc. (“Avalon” or the “developer”)’s proposed Thor Lake Rare Earth Element Project. Avalon has applied to develop a primarily underground mine and milling complex approximately 8km north of the Hearne Channel of Great Slave Lake, 100km southeast of Yellowknife and approximately 100 km west of Lutsel K’e. Avalon proposes to ship concentrate from the proposed mine by barge to a proposed hydrometallurgical facility on the south side of Great Slave Lake at Pine Point, Northwest Territories.

In April of 2010 the Mackenzie Valley Land and Water Board received applications for a Type A Land Use Permit (MV2010D0017) and Type A Water License (MV2010L2-005) for the project. As part of their application Avalon submitted a description of the proposed development. In accordance with section 124 of the *Mackenzie Valley Resource Management Act (MVRMA)* the Mackenzie Valley Land and Water Board then initiated a preliminary screening of the project.

On June 11th, 2010, the Mackenzie Valley Land and Water Board referred the project application to environmental assessment under paragraph 125(1)(b) of the *MVRMA*. The basis of referral was “because the development proposal might have a significant adverse impact on the environment and be of public concern”. The key areas where the Mackenzie Valley Land and Water Board identified potential impacts to occur included tailings-related water quality issues, metal leaching/acid rock drainage, barging, and reclamation/closure.

On June 25, 2010 the Review Board notified Avalon that the development had been referred to environmental assessment.

This environmental assessment is subject to the requirements of Part 5 of the *MVRMA*. Section 3 of the Review Board’s *Environmental Impact Assessment Guidelines* describes the environmental assessment process in detail. That document, as well as the Review Board’s *Rules of Procedure*, other guidelines, reference bulletins and other relevant policies are applicable to this assessment and are available online at www.reviewboard.ca.

This work plan describes roles and responsibilities, phases and milestones, requirements for written submissions, and estimated timelines for the environmental assessment of Avalon’s Thor Lake Rare Earth Element Project.

2 Scope of development/scope of assessment considerations

The Review Board’s *Terms of Reference* for this environmental assessment identifies and defines the scope of the development and the scope of assessment for the Thor Lake Rare Earth Element Project. This and other documents are available on the public *registry* for this file.

3 Roles and responsibilities

This section outlines the roles and responsibilities of the Review Board and its staff, government bodies, the developer and other parties involved in the environmental assessment. Further information regarding the roles and responsibilities of different groups and the structure of the environmental assessment process is available in the Review Board's *Environmental Impact Assessment Guidelines and Rules of Procedure*.

3.1 Review Board

The Review Board has a duty to undertake the following during this environmental assessment:

- Conduct the environmental assessment in accordance with section 126 of the *MVRMA*;
- Take into account any previous screening or assessment report made in relation to the development, in accordance with section 127 of the *MVRMA*;
- Determine the scope of development, in accordance with subsection 117(1) of the *MVRMA* (see the *Terms of Reference*);
- Consider a variety of required factors, in accordance with subsection 117(2) of the *MVRMA*;
- Upon completing the environmental assessment:
 - Determine where the development is not likely to have any significant adverse impact or be a cause of significant public concern, that an environmental impact review need not be conducted and the project should proceed to the regulatory stage of approvals [paragraph 128(1)(a)];
 - Recommend where the development is likely to have a significant adverse impact on the environment, the approval of the proposal be made subject to the imposition of such measures as it considers necessary to prevent the significant adverse impact [subparagraph 128(1)(b)(ii)];
 - Order that an environmental impact review of the proposal be conducted, either on the basis that the development is likely to have a significant adverse impact on the environment [subparagraph 128(1)(b)(i)] or be a cause of significant public concern [paragraph 128(1)(c)]; or
 - Recommend that the proposal be rejected without an environmental impact review, where the development is in its opinion likely to cause an adverse impact on the environment so significant it cannot be justified (paragraph 128(1)(d));
- Provide a *Report of Environmental Assessment and Reasons for Decision* to the Federal Minister in accordance with subsection 128(2) of the *MVRMA*.

The Review Board's designated Environmental Assessment Officer is the primary point of contact between the Review Board and the developer, government bodies, non-government organizations, aboriginal groups, the public and other interested parties. Paul Mercredi,

Avalon Rare Metals Inc.'s Thor Lake Rare Earth Element Project

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Environmental Assessment Work Plan

August, 2011

Environmental Assessment Officer, will coordinate this environmental assessment. He can be reached at:

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The Review Board's coordinating role does not limit or preclude the developer's contact with other parties during the environmental assessment process – the Review Board actively encourages meaningful dialogue between parties in parallel forums.

3.2 Developer

During this environmental assessment, Avalon Rare Metals Inc. has a responsibility to respond in a suitable and timely manner to directions and requests issued by the Review Board. Such requests include but are not limited to the *Terms of Reference for the Developer's Assessment Report*, information requests, requests for document translation, deficiency statements, and requests for public hearing and technical session presentations, among others.

The developer (and any other interested party) may present additional information at any time to the Review Board beyond what specific requests during the environmental assessment process. The Review Board encourages the developer to continue consulting all potentially-impacted communities and organizations throughout the environmental assessment process. The Review Board may request that the developer provide written records of consultations and other meetings for the public registry in a format acceptable to the parties to the meeting, with a focus on reporting how the consultations have influenced the design of any part of the development or any steps the developer plans to take to mitigate a concern or issue. For the public registry the developer is also welcome to provide responses to submissions by other parties.

3.3 Government bodies

Federal and territorial government bodies may participate in the environmental assessment process as:

- A Regulatory Authority as defined in the *MVRMA*;
- A Responsible Minister as defined in the *MVRMA*;
- A Federal Minister as defined in the *MVRMA*; or
- A provider of technical expertise for the environmental assessment.

These roles are not mutually exclusive. The Review Board expects all government bodies with relevant expertise and information to fully participate as technical reviewers during the environmental assessment. Municipal governments and aboriginal governments are also often valuable contributors to the environmental assessment process.

3.4 Other parties

First Nations, other aboriginal groups, non-governmental organizations, members of the public and other interested parties may request party standing by applying to the Review Board for party status as per the Review Board *Rules of Procedure*. Parties may provide the Review Board with information relevant to consideration of issues in the environmental assessment or the Review Board may request information for further analyses. Parties are expected to participate and respond to directions and requests issued by the Review Board in a suitable and timely manner.

Parties may present information at any time during the environmental assessment and may be given an opportunity to submit information requests for Review Board approval during the analysis phase, and present and ask questions at hearings.

3.5 Technical advisors to the Review Board

In addition to the expertise available from parties, the Review Board may also choose to hire technical advisors to provide technical expertise on specific aspects of the environmental assessment. The Review Board will place advance notice on the public registry for this environmental assessment of intent to hire a specific technical advisor along with their qualifications and a disclosure letter, and allow parties to comment before making a final decision on retaining the advisor.

4 Work Plan milestones and phases

Table 1 summarizes the milestones and responsibilities in the environmental assessment process.

Table 1 - Milestones + Responsibilities in the Environmental Assessment Process

Milestone	Developer	Government Bodies	Other Parties	Review Board and Staff
Environmental Assessment start-up				✓
Scoping Sessions	✓	✓	✓	✓
Draft Terms of Reference & Work Plan				✓
Review and comment on draft Terms of Reference and Work Plan	✓	✓	✓	
Final Terms of Reference				✓
Final Work Plan				✓
Developer's Assessment Report	✓			
Conformity Check and Deficiency Statement (if required)				✓
Deficiency Statement Response	✓			
Information Requests		✓	✓	✓
Information Request Responses	✓	✓	✓	
Technical Meeting(s) (if required)	✓	✓	✓	✓
Technical Analysis		✓	✓	✓
Public/Community Hearings	✓	✓	✓	✓
Review Board Report of EA and Reasons for Decision				✓
Response from the Minister of Indian Affairs and Northern Development		✓		
Consultation - throughout / as required	✓	✓	✓	✓

Typical environmental assessments have five parts: start-up, scoping, analytical, hearing and decision phases.

The Review Board may alter the Work Plan at any time during the environmental assessment in response to a Request for Ruling or on its own motion. Also, the Review Board may close the public record (which is different from the public registry) and complete the environmental assessment at any time if sufficient evidence has been gathered to make a decision pursuant to section 128 of the *MVRMA*.

4.1 Start-up phase During this phase, the Review Board initiated the *MVRMA*-required

notification measures as well as opened the paper and web-based public registries for the environmental assessment. All documents related to this environmental assessment are accessible on the website public registry at www.reviewboard.ca and at the Review Board offices. Review Board staff regularly update the public registry and notify interested parties of the filing of new documents.

4.2 Scoping phase The Review Board undertook an extensive issues scoping phase, including holding five staff-led scoping sessions in communities around Great Slave Lake and a technical scoping session in Yellowknife. These scoping sessions were designed to make sure potentially-affected groups and responsible government and other agencies were fully aware of the nature of the proposed development, and to allow interested parties to help the Review Board identify key concerns and potential issues. The Review Board also received scoping submissions from the developer and all interested parties.

Using information from the scoping phase, the Review Board developed draft and final *Terms of Reference* and *Work Plan* documents. For final documents the Review Board considered written comments from parties to the environmental assessment as well as comments from scoping sessions, and documents on the public registry. The *Terms of Reference* contains the Review Board's determination on the scope of the development and the scope of the assessment including directions to the developer on required information for the *Developer's Assessment Report*.

4.3 Analytical phase The main purpose of the analytical phase is to collect the bulk of the information required for the Review Board to make certain decisions. This phase commonly contains five key elements:

1) Developer's Assessment Report: The developer is responsible for submitting to the Review Board a *Developer's Assessment Report* that complies with the Review Board's *Terms of Reference* requirements.

2) Conformity Check, Review Board Deficiency Statement and Developer's Response (as necessary): Upon receipt of the *Developer's Assessment Report*, the Review Board conducts a conformity check to ensure that the developer has provided the required information. If needed, the Review Board will issue a deficiency statement identifying those areas in which the developer has not provided sufficient information to address an item listed in the *Terms of Reference*. The developer will have to submit information to the Review Board to fill the information gaps identified by the deficiency statement. If the Review Board is still not satisfied with the information, it retains the right to halt the environmental assessment and not allow public distribution of the *Developer's Assessment Report* until it has received an adequate response. Once the document is found in conformity, Review Board staff will provide direction to the developer for distribution of the *Developer's Assessment Report* to interested parties.

Party Status: After the Review Board posts the *Developer's Assessment Report* to the public registry, the Review Board will issue a call for groups to self-identify their interest in being an official party to the environmental assessment. *Request for Party Status* forms are available at any time on the Review Board's public registry. Party status confers certain rights to groups such as the ability to submit information requests, engage in technical meetings, issue technical reports, make presentations and ask questions of other parties at hearings. The developer is automatically a party to this environmental assessment and is not required to apply for party status. The Review Board issues party status on a case-by-case basis. If the Review Board chooses not to confer party status the applicant retains the ability as a member of the public to participate and provide input to the process.

3) Information requests and responses to information requests: This step in the process is an opportunity for parties to the environmental assessment to submit Information Requests to the developer and other parties. Information requests are specific and focused requests for additional information or clarification on specific aspects of the project in order to understand effects from the proposed development better. Any party to the environmental assessment can submit Information Requests, and can direct the Information Request to any other party. Parties are requested to submit Information Requests directly to the responding party and to copy the Review Board. The Board will decide on an Information Request's relevance to the environmental assessment if the responding party declines to answer it. If the Review Board deems the Information Request to be within the scope of the assessment, it will ask the responding party to provide an answer.

Party status is required in order to submit Information Requests. Guidance and examples on the submission of information requests can be found in Appendix F of the *Environmental Impact Assessment Guidelines 2004*, available on the Review Board's website. A template for Information Requests is available on the website under: Reference Library, Practitioner's Toolbox, Forms and templates.

It is important to note that Information Requests need to be directly relevant to the scope of the environmental assessment and must add value to the assessment and determination of impacts from the project on the biophysical, socio-economic and cultural environment of the Mackenzie Valley.

In an effort to improve process efficiencies and reduce the number of formal information requests, the Review Board encourages the developer and parties discuss issues at any time during the environmental assessment through informal meetings. A summary of discussions between parties and the developer at these meetings should be kept and submitted to the Board to become part of the public registry. A template on how to complete a meeting report can be found on the Review Board website by navigating to the forms and templates section.

4) Technical meeting(s): The Review Board may choose to hold roundtable technical meetings to permit in-person question-and-answer sessions between parties and the

developer in a facilitated setting. Technical meetings typically address crucial issues and allow more in-depth discussion of complex or controversial subjects with expert involvement. In advance of a roundtable technical meeting, parties submit questions/comments to the developer or to other parties by way of the Review Board. This allows the developer or parties sufficient time to develop a response. The Review Board exercises discretionary control over what issues will be the focus of the meeting. Review Board staff record the meeting and any of the developer's commitments. Afterwards, the Review Board issues a meeting report that identifies main topics and lists both resolved and unresolved issues. The developer or any other party is welcome to provide additional input via undertakings or response letters after the technical meeting(s).

5) Technical reports from parties: This is a critical stage in the environmental assessment process that identifies and evaluates key issues and impacts in advance of the public hearing(s). This part of the analytical phase of the environmental assessment relies heavily on the expert assistance of parties – whether they are different levels of government, aboriginal groups, or other organizations. All parties have the right to issue technical reports critiquing the *Developer's Assessment Report*, information request responses and other information brought forward during the analytical phase. All parties can bring forward new evidence, estimations of impact significance, and suggestions for mitigation in their technical reports. Technical reports from parties are to clearly state the reviewer's conclusions, recommendations and supporting rationales. The developer is welcome to provide responses to technical reports, including any proposed amendments, additions or refinements to the development description, its own prediction of impacts, or mitigation commitments.

4.4 Hearing phase: The Review Board may choose to hold a hearing or hearings to address issues that remain outstanding at this point in the environmental assessment. In the event that the Review Board opts for a hearing, the Board will provide public notice a minimum of 30 business days in advance of the hearing on the public registry. There are typically two types of hearings: a relatively informal community hearing or a more formal (often called "public") hearing, as detailed in the *Rules of Procedure*. Hearings offer an opportunity for the developer, aboriginal groups, government departments, other parties and the public to directly address the Review Board with evidence regarding the potential impacts and public concerns related to the proposed project. Parties may provide formal presentations at hearings, provided they submit material ahead of time for Review Board and party consideration. All parties and the Review Board have the opportunity to question the developer and other parties at hearings through the Review Board Chair. At the hearing, the Review Board may identify undertakings that parties or the developer commit to and submission deadlines for any relevant and additional information for the public registry. Following the hearing, the Review Board also retains the right to issue additional Information Requests prior to closing the public record.

4.5 Decision phase: Following the hearing phase, the Review Board closes the public record for the environmental assessment and begins final deliberations, culminating in a

Report of Environmental Assessment and Reasons for Decision. If, during deliberations, the Review Board requires clarification of evidence on the public record it may issue “requests for clarification” without reopening the public record. Unlike Information Requests, a “request for clarification” does not seek new information or evidence but rather a clarification of evidence already on the public record.

The Review Board’s decision will include a single recommendation from among the options available to it under subsection 128(1) of the *MVRMA*, and may also require mitigation measures be put in place in order for the development to proceed. The Review Board’s decision document may also identify non-binding suggestions for the developer or other responsible groups to better protect the environment. The Review Board will provide the Minister of Indian and Northern Affairs Canada (the Federal Minister) with its *Report of Environmental Assessment* as per subsection 128(2) of the *MVRMA*

5 Written submissions

The Review Board encourages all parties as well as members of the public to submit evidence at any time up until the closing of the public record. Usually such submissions will be accessible as public registry documents. However, under special circumstances and with sufficient rationale from the submitting party the Review Board may accept documents on a confidential basis. The Review Board will decide on confidentiality on a case-by-case basis on the merits of a request, as per its *Rules of Procedure*. The public record contains any confidential files for an environmental assessment, as well as any other public registry documents that the Review Board considers during its weighing of evidence and decision making period.

All submissions should be in a format that is easily usable and available to all parties and should follow Review Board templates where available. Parties should submit documents digitally in either Word or pdf. formats. Hardcopy, hand-delivered, couriered or fax transmissions are acceptable as long as they are reproducible in a legible format via photocopier/scanner. The Review Board reserves the right to require any party or the developer which has a large file to provide copies to all parties directly in a digital or hard copy format.

The Review Board will not consider any submission after the closing of the public record and reserves the right to not consider evidence in a public hearing that has not been provided ahead of time for the consideration of other parties.

6 Estimated schedule

Table 2 provides an estimate of the milestones and phase durations in this environmental assessment.

Table 2 – Estimated schedule for EA1011-001: Thor Lake Rare Earth Element Project

Milestone	Estimated completion
Start-up phase	
Referral to environmental assessment	Complete
Scoping phase	
Scoping Sessions Preparation	Complete
Scoping Sessions in Great Slave Lake communities and Yellowknife	Complete
Scoping Submissions by Interested Parties	Complete
Preparing draft <i>Terms of Reference</i>	Complete
Comments on draft <i>Terms of Reference</i>	Complete
Final <i>Terms of Reference</i>	Complete
Analytical phase	
<i>Developer's Assessment Report</i>	Complete
Review Board internal information requests (IR)	August 2011
Developer response to Review Board IR	To be determined by developer
First Round Information Requests	Within 45 days of IR responses
Developer's response to First Round IRs	To be determined by developer
Roundtable technical meetings	Within 60 days after IR responses
Second Round of IRs (if required)	Within 60 days after Technical meetings
Responses to Second Round of IR	To be determined by developer
Parties' technical reports	Within 60 days after 2 nd IR responses
Hearing phase	
Pre-hearing conference	Within 30 days after Technical Reports
Conduct of Public (FS) and/or Community Hearing (NB)	Within 30 days after pre-hearing conference
Undertakings	Within 30 days after the hearing.
Closure of Public Registry	Following undertakings
Decision phase	

Milestone	Estimated completion
Review Board <i>Report of Environmental Assessment</i>	Within 90 days after closure of registry
Federal Minister's response to the Review Board's <i>Report of EA</i>	