

April 16, 2012

Our file: EA1011-001

Via email

David Swisher  
Vice President, Operations  
Avalon Rare Metals Inc.  
Unit 330 - 6165 Hwy 17  
Delta, BC V4K 5B8

Dear Mr. Swisher:

**Re: EA1011-001: Thor Lake Rare Earth Element Project – Review Board’s 22-March-12 Clarification Letter**

The Review Board appreciates the 2-April-12 letter from Avalon Rare Metals Inc. that partially responds to items the Review Board identified in the 22-March-12 clarification letter. As Avalon has acknowledged there remains deficiencies with respect to Avalon’s response to the Review Board’s clear and reasonable expectations set out in the 22-March-12 letter. In the 22-March-12 letter the Review Board identified three pre-requisite items critical to the efficient and effective conduct of a technical session and to the overall environmental assessment process for the Thor Lake Project. Those expectations remain in effect, and the Review Board will defer scheduling of the technical session until the expectations are met.

On the subject of water quality objectives: the Review Board notes that environmental assessment is the appropriate forum for establishing water quality objectives.

The Review Board recognizes that Avalon – through its 2-April-12 letter – has proposed site-specific water quality objectives for those parameters that CCME (Canadian Council of Ministers of the Environment) guidelines cover including the location where Avalon proposes to meet the objectives: Drizzle Lake outflow. With regard to Avalon’s reference to CCME guidelines as being site-specific water quality objectives (SSWQOs) for the Thor Lake Project mine-site – items #2a and #2b in the Review Board’s 22-March-12 letter – the Review Board notes that CCME guidelines do not fully encompass the effluent Avalon would likely discharge downstream. In other words: for Avalon’s Thor Lake Project, CCME guidelines represent an incomplete/deficient suite of site-specific water quality objectives. For example, CCME guidelines are silent for lanthanum and cerium: these two parameters are likely to be present in the effluent Avalon proposes to discharge into the downstream



environment<sup>1</sup>. As such, items #2a and #2b from the 22-March-12 letter remain outstanding (including for corresponding rationale) for all elements, parameters, and substances that are likely present in the effluent Avalon proposes to discharge downstream but not covered through CCME guidelines. Items #1 and #3 from the 22-March-12 letter also remain outstanding. For clarification, Item #3 refers to identification of all water quality parameters present in the Item #1 test-effluents.

As always, the Review Board remains committed to timely, efficient and effective environmental assessment that fully considers potential impacts to all biophysical, cultural, and social components of the environment in the Mackenzie Valley. With critical information in hand the environmental assessment can move forward in both an expeditious and effective manner.

Sincerely,

Paul Mercredi

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<sup>1</sup> The Review Board notes that in the original DAR Table 6.4-2, the modeled ratio of Plant Discharge to the Thor Lake concentration after 20 years was reported as about 1408:1, but was subsequently corrected to about 10:1 in Avalon's response to MVRB IR #1.2. In Table 1 of Avalon's Response #2.1 to IR AANDC #2, the ratios of Day 5 Decant Concentrations to the Max. Predicted Concentrations Years 1-20 (in Thor Lake) are reported as about 1320:1, apparently reflecting the error in calculation that appeared in the original Table 6.4-2. Please confirm that Table 1 of Avalon's Response #2.1 to IR AANDC #2 is correct or submit a corrected response.