

Avalon's BFS in full swing, world's second largest REE deposit on track for 2015 production



Donald S. Bubar President & CEO

After reaching a major milestone on June 21, 2010 with the release of a pre-feasibility study for its wholly owned Nechalacho rare earths project in Thor Lake, NWT, Avalon Rare Metals is forging full steam ahead with a feasibility study aimed for completion by mid-2012. As further proof of its confidence on the project and commitment to upholding shareholder value, the company has, meanwhile, assembled the operations team needed to bring it to full production. President and CEO Don Bubar discusses why Avalon is a cut above other new potential suppliers of heavy rare earths.

Resource Intelligence: Congratulations on your PDAC 2010 Environmental & Social Responsibility Award. Could you tell us more about it?

Don Bubar: The award is in recognition of our community engagement efforts during the exploration of the Nechalacho rare earth elements deposit in Thor Lake. We set up with the Mine Training Society, a program aimed at maximizing employment opportunities for local aboriginal youth. Under that program, we provided skills training for working on a diamond drill. Twelve have graduated from it and three have since been employed at the site and one of them has progressed to get his full certification to be a diamond driller. The program was very successful and earned us some respect with the local community.

Ri: Could you update us on your flagship Thor Lake project?

DB: We reached a major milestone in 2010 when we completed a prefeasibility study on the development of the Nechalacho rare earth element deposit, demonstrating that we have an economically viable development opportunity. It also allowed us to start to engage with end-users of rare earths that ultimately we have to develop relationships with. Rare earths are not exchange-traded, so you have to find customers for the products if you're going to be able to develop the project. In September, we raised the \$40 million we needed to fund a bankable feasibility study by mid-2012.

Ri: What are the results so far with the engagement of end-users?

DB: It's going pretty well. We've had discussions with potential customers in Japan, Europe and other parts of the world going back to 2007 when we first started working up there. It's mainly because our resource has a high proportion of the heavy rare earths unlike other resources that are mostly light earths. A lot of these customers are looking for new potential suppliers of heavy rare earths to emerge outside of China. Avalon has positioned itself as the most advanced of those potential new suppliers that can bring a new significant supply of the heavies to market by 2015. That's getting the attention of the consumers out there and, combined with the completion of the prefeasibility study, it is also allowing us to have a more serious level of discussion that could lead to strategic alliances with some of the end users.

Ri: What is the project's projected annual output and how much of the global demand will it satisfy?

DB: The prefeasibility study contemplated an output of 10,000 tonnes per year of total rare earth oxide plus by-products zirconium, niobium and tantalum. We concentrate them all at the same time and produce those as by-products automatically. The rare earths would constitute 5% of the demand anticipated in 2015. It's important to note that we're not constrained by the size of the resource to that production rate. We determined it according to the anticipated market demand for those elements and what our market share might be in 2015. We're certainly in a position to revise that number upward if we see the justification for it.

Ri: What is your NPV and what are your revenues expected to be?

DB: Prices have moved around a fair bit since we did the prefeasibility study. If you plug in the current prices it would be quite a bit higher than what we

forecast earlier. The base case that was used in the prefeasibility study was very conservative as they are always designed to be. We're seeing some clear optimization opportunities to get the NPV, at an 8% discount rate, close to \$1 billion on a pre-tax basis and the IRR is into the mid-20s.

Ri: Are you still on track towards 2015 or is there any plan to advance production?

DB: We would sure like to be able to but realistically it's unlikely we would be able to shrink that time line in a significant way. We have to do an environmental assessment as part of the permitting process in the Northwest Territories and it's a lengthy process. We think it's important to make sure that we are very thorough on the environmental assessment and not try to rush it.

Ri: China's decision to limit exports has boosted your share price as well those of other similar companies. Do you see this for the long term?

DB: China has given every indication that they plan to continue to have tight control over the production and export of the primary rare earths products and until there are new sources to supply rare earths from outside China, the material will continue to be in short supply. Demand is continuing to grow and prices will likely move up even higher in the short to medium term and you'll continue to see a lot of concern expressed about it and more media coverage of the issues that these shortages present for Western consumers.



Senior Geologist Chris Pedersen analyzes rare earth contents in the rocks using a Niton XRF analyzer.

RI: You previously discussed going downstream, what exactly are you looking into and when do you see that happening?

DB: The prefeasibility study modeled the development on the basis of producing a mixed rare earth concentrate which we would sell to secondary processors. We developed a pricing model based on our view of where prices are going and then to come up with a price for that product, discounted the separated prices to account for the cost of separation. What we found is that there is quite a bit of value-added in doing the separation, although it is an expensive plant to build. As we engaged more with consumers around the world, the message we were receiving was that they want to see us produce a separated oxide product and not have to rely on separation facilities in China. There is no facility right now outside of China of the size that we would need to produce the amount of heavy rare earths on a separated basis that we think we can. So if we are going to do that we've got to find our own solution and it is appealing to do so as it presents an opportunity for Avalon to position itself as the

leading new supplier of separated heavy rare earth oxides in the world outside of China.

RI: Do you foresee the plant being here in Canada?

DB: It could be. We did a scoping study on the separation plant in the fall and contemplated a possible location in southern Ontario but it could be anywhere where we have access to the chemical reagents needed to process the concentrate.

RI: What company developments last year have added value to Avalon?

DB: We've added a lot of people and we now have over 20 staff involved in developing the project and will continue to add to that going forward. We've decided we want to build an operating team to take this project through feasibility ourselves and started to assemble the operating team needed to bring it to full production.

RI: For this year what are your priorities as a company?

DB: We are going to keep advancing on all those fronts that are required to get that bankable feasibility study done. A key objective here is to develop customer relationships that could evolve

into a strategic partnership and one of the new people we brought in last year was a sales and marketing expert, Pierre Neatby, who is now doing exactly that.

RI: Where do you see Avalon over the next 3 to 5 years?

DB: Getting that project into production, but we're not limiting ourselves to just that. We've got a talented exploration team and we're going to look at developing some new exploration projects.

RI: If I were an investor give me three reasons why I should invest in Avalon.

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~President & CEO Donald S. Bubar

DB: If you like the rare earths as a place to be and if you like the whole story with growing demand and clean technology and constrained supplies out of China, then we're an attractive play because we are one of the most advanced companies. We have the heavy rare earths in our group of rare earth elements to offer the market. Being advanced is important because first-mover advantage is key to success in a market that is growing but still not as big as the copper or iron ore markets.

We see there is room perhaps for a handful of new players to enter that market and serve this demand outside of China. That market share is available on a first-come first-served basis and by being five or six years further advanced than most of the other newcomers Avalon has a big advantage in getting there first, securing that market share, and maintaining it.

RI: Is there any other information that you think investors should know?

DB: We are emphasizing corporate social responsibility as a core theme and operating philosophy in the company. These days it is important to demonstrate that you are a responsible operator from both an environmental and social standpoint. We see real value in that for the company. We are producing commodities that are vital to clean technology and a more sustainable world; if we can couple that aspect of our business with a social and environmentally responsible operating philosophy then we've created a unique business in the world of mineral production. Hopefully, this will allow us to expand our audience in the global investment community and include those clean-technology-oriented and socially-responsible investors.



Investor Highlights:

Stage: Bankable Feasibility Stage on Nechalacho Deposit

Market Cap: C\$550,000,000 as of January 29, 2011

Share price: up 124% in 12 months; 1,086% in 24 months

Share price: C\$5.93 as of 29 January 2011

Commodity: Rare Earth Elements, zirconium, niobium, tantalum, indium, gallium, tin, lithium

Production planned: 2015

Mine Life: 20 years minimum

Cash: \$37,000,000 as of 29 January 2011

Highlights:

- Avalon's Nechalacho deposit has the highest proportion of the more valuable heavy rare earths (over 20% in basal zone portion)
- With production planned for 2015, Avalon is the only company in a position to deliver heavy rare earths by 2015
- This first-mover advantage also puts Avalon in a position to establish itself as the leading new supplier of separated heavy rare earth oxides in the world outside of China
- Mineral Resources Indicated: 57.49 million tonnes; Inferred: 226.88 million tonnes
- Early Adopter of a formal Corporate and Social Responsibility policy into its corporate culture