Avalon continues to advance East Kemptville Tin Project with completion of PEA

Avalon Advanced Materials {TSX: AVL}

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Toronto, ON – **Avalon Advanced Materials {TSX: AVL}** is pleased to report that further to the Company's news release of June 28, 2018, Avalon has finalised its Preliminary Economic Assessment ("PEA") on the East Kemptville Tin Project (the "Project").

Avalon also held key meetings with Ministry of Natural Resources officials in Yarmouth, Nova Scotia last week toward achieving a streamlined permitting and approvals process for the Project. The re-development model, as presently conceived, is an environmental remediation project that will be financed through the sale of tin concentrates recovered in large part

from previously-mined mineralized material on the site.

From Day 1 of operations, Avalon's model provides for a reduction in the long term environmental liability and eventual full rehabilitation of this brownfield site. Due to this, it is anticipated that the permitting and approvals process will be much shorter than for a greenfield mine development.

There is strong community support for the Project, as well as from local politicians, First Nations and environmental NGOs. Avalon is also in discussions with a number of local businesses towards collaboration on future opportunities including, among others, a long-term vision for turning the rehabilitated site into a solar power generation facility.

Avalon's Vice President, Sustainability, Mark Wiseman commented, *"Avalon strives to be a leader in adopting sustainability best practices and innovative project designs. This approach will create an early revenue stream and a platform for growth, while providing a solution for the long term environmental liability on site. In the future, my hope is that this model may be applied elsewhere in our industry's ongoing efforts to minimize its environmental and energy footprint."*

Preliminary Economic Assessment

A PEA on the current small-scale re-development and site rehabilitation concept has been prepared by independent consultants Micon International Limited, Toronto, ON. The PEA will be filed with the Province of Nova Scotia as part of the

Company’s application for a mineral lease and it will be filed on-line (SEDAR) within the next few weeks. Further work to optimise the development model, including the potential implementation of new ore-sorting technology, is ongoing.

The finalised mine plan is based on the updated mineral resource estimate disclosed in the Company’s new release dated June 28, 2018. The redevelopment model primarily involves processing of the 5.87 million tonne stockpile of previously-mined oxidized low-grade mineralisation, supplemented by selective mining of near-surface fresh higher-grade tin mineralisation the Main and Baby Zone deposits.

The freshly mined tin mineralisation will serve an important purpose in the site rehabilitation concept by allowing for the generation of clean tailings free of sulphide minerals. These clean tailings will be used to create a cover for the existing dry-stacked tailings, which will fully remediate the long term environmental liability associated with the tailings and facilitate its ultimate conversion into other long term beneficial uses, such as a solar power generation or agriculture. Avalon’s small-scale, re-development model utilizes existing infrastructure and previously-mined material, making the Project a low energy, low green-house gas producer that may also make the final product more attractive to Avalon’s cleantech customers.

The development model utilised for the PEA contemplates a production schedule of approximately 1,300 tonnes per annum of a 55% tin concentrate for 19 years, with tin concentrates being sold and shipped for treatment in international markets. The PEA concludes that the small-scale re-development model for tin concentrate production at East Kemptville is

economically viable at current tin prices in the range of US$20,000 to US$22,000/tonne.

Assuming an average go-forward tin price of US$21,038/tonne (as forecast by the World Bank Commodity Price outlook for 2020), and an exchange rate of CAD 1.30/USD, the Project has an indicated pre-tax IRR of 15.0% and an NPV of C$17.9 million at an 8% discount rate. The initial capital cost is estimated at C$31.5 million. Average annual revenues from sales are calculated as C$17.75 million vs. annual production costs of C$11.6 million.

Project Optimisation Opportunities

While the results of the PEA indicate good economic potential, there are a number of opportunities to further improve Project economics. One of the most promising of these is the potential to upgrade the feed material to the processing plant through ore-sorting. Results from an initial evaluation of ore-sorting technology carried out in 2017 were very encouraging. Additional results from a second evaluation using an alternative ore-sorting technology are expected by the end of this month, after which further testwork or a piloting program at site is likely.

Successful application of ore-sorting process technology offers a number of benefits to the Project model. By rejecting non-mineralised waste rock before feeding it into the concentrator, ore-sorting allows for a reduction in the size of the concentrator with attendant reductions in both capital and operating costs.

It may also allow for economic recovery of tin from other mineralised materials stored on site that are presently not included in the re-development model. Lastly, ore-sorting technology will reduce the amount of fine tailings produced, creating opportunities to improve tailings deposition plans and sludge management with respect to pit dewatering.

Project Financing Plans

The East Kemptville Project has attracted strong interest from a number of potential financial partners, including equipment manufacturers interested in supplying the modular gravity plant and the ore-sorting technology, as well as others that have expressed interested in securing off-take of the tin concentrates (which are in short supply from non-conflict sources).

Other parties have expressed interest in equity participation based on the site rehabilitation concept and the compelling precedent that it will set for how closed mine sites, now treated as perpetual liabilities, can be profitably rehabilitated through application of new and innovative process technologies and remediation strategies.

The technical information included in this news release has been reviewed and approved by David Marsh, FAusIMM (CP), Senior Vice President, Metallurgy and Technology Development.

About Avalon Advanced Materials Inc.

Avalon Advanced Materials Inc. is a Canadian mineral development company specializing in niche market metals and

minerals with growing demand in new technology. The Company has three advanced stage projects, all 100%-owned, providing investors with exposure to lithium, tin and indium, as well as rare earth elements, tantalum, niobium, and zirconium.

Avalon is currently focusing on its Separation Rapids Lithium Project, Kenora, ON and its East Kemptville Tin-Indium Project, Yarmouth, NS. Social responsibility and environmental stewardship are corporate cornerstones.

For questions and feedback, please e-mail the Company at ir@AvalonAM.com