

## **Avalon Provides Progress Report on Separation Rapids Lithium Project, Kenora On**

October 26, 2017

Toronto, Ontario--(Newsfile Corp. - October 26, 2017) - [Avalon Advanced Materials Inc.](#) (TSX: AVL) (OTCQX: AVLNF) ("Avalon" or the "Company") is pleased to provide the following update on recent activities on its Separation Rapids Lithium Project. The Company is focused on advancing its proposed Phase 1 lithium production facility and has been analyzing various alternatives on flowsheets to meet the needs of potential battery materials and glass-ceramics customers, as well as lithium mineral concentrate processors, that have expressed interest in the products. The mineralogy of the Separation Rapids lithium resource, containing significant quantities of both petalite and lepidolite, provides opportunities to produce both lithium carbonate and lithium hydroxide for battery makers and petalite as an industrial mineral for glass makers. Accordingly, recent work on the resource block model following the spring drilling program has focused on generating a detailed mineralogical model of the deposit.

### **Resource Update and Phase 1 Plant Design**

As disclosed in the Company's News Release dated [July 18, 2017](#), the spring drilling program has generated considerable new data towards creating a detailed mineralogical model of the deposit. The four in-fill holes contributed to a better understanding of resource geometry for mine planning purposes, in particular the spatial distribution of the lepidolite rich sub-unit that comprises at least 20% of the known resource. The block model created will also help guide further drilling planned for later this fall designed to expand the resource to depth.

Mapping mineralogical zonation in the deposit is integral to designing the flowsheet for the planned Phase 1 production facility in order to maximize recoveries of lepidolite and petalite which will need to be concentrated separately. Initial testwork has shown that lepidolite can be recovered as the first step in a sequential flotation process prior to flotation of petalite. Concentrates of lepidolite are attracting increasing interest as a feedstock for production of lithium carbonate due to innovative low cost process technology such as the L-Max® process of Lepidico Ltd. As reported in the Company's news release dated [February 6, 2017](#), Avalon signed a letter of intent with Lepidico under which it is contemplated that Avalon would sell a minimum of 15,000 tonnes per annum of lepidolite concentrate produced from its Phase 1 plant to Lepidico for processing at Lepidico's planned Phase 1 commercial lithium carbonate production facility. Lepidico now contemplates building this facility in Ontario. Avalon's Phase 1 plant would also include a circuit to produce lithium hydroxide from petalite using the innovative new process flowsheet developed by the Company in 2016.

Numerous expressions of interest have been received from potential customers for the Company's lithium products and discussions on off-take commitments are ongoing. Once off-take commitments are secured that define the priority lithium product lines, the Company can finalize the design and engineering of the Phase 1 plant. With demand for lithium growing rapidly and few advanced lithium projects ready to initiate production, the Company is well-positioned to bring a new supply to the market to serve priority customers, once project financing is in place.

### **Summer Geological Mapping Program and Environmental Studies**

The 2017 summer geological mapping and sampling program was carried out on the western part of the property covering the [new claims acquired earlier this year](#). This work confirmed the potential for discovery of additional lithium pegmatite resources over a six kilometre long trend to the west of the main Separation Rapids lithium deposit and has outlined six new pegmatite targets based on either lithogeochemical or biogeochemical (vegetation) sampling. The westernmost occurrence, known as the Glitter pegmatite, has never been drill-tested and yielded **1.18% Li<sub>2</sub>O over 14.8 metres** in a continuous chip sample of petalite mineralization collected this summer, confirming results obtained by previous operators.

Avalon completed site water, sediment, fish, invertebrate and endangered species studies in June and October that successfully advanced the validation of the 1999 environmental baseline study. Sites for infrastructure, including the tailing management facility, have been identified that do not impact fish or other wildlife habitat. Leachate work has been initiated on the site rock and tailings to confirm that these have a low risk of generating acid rock drainage.

Avalon held a multi-Ministry meeting to review the project and associated permitting requirements as well as separate meetings with the leadership of Wabaseemong Independent Nations and local representatives of the Métis Nation of Ontario to present the project in detail, obtain input and discuss potential avenues for collaboration. Overall, the Company does not anticipate any delays in securing the necessary permits and approvals to proceed with the Phase 1 production facility.

### **Future Work**

Further drilling is planned in order to increase the total lithium resources in the main Separation Rapids lithium deposit, which is open for expansion to depth below 200 metres with the deepest holes at present indicating similar widths and grades as in the near surface holes. In addition, the lepidolite-rich sub-unit of the main pegmatite is also open for expansion to depth and along strike.

Detailed mineralogical studies using several different techniques are underway in order to further quantify the lithium pegmatite resources on the basis of mineralogy, as well as grades of the rare elements lithium, tantalum, cesium and rubidium.

Further geological work on the regional targets to the west is planned, in order to bring these to the drill stage. The Glitter pegmatite merits drill-testing, along with the similarly untested petalite-bearing "West" pegmatite located just 800 metres west of the main deposit. These can be tested in the same program as the deeper drilling planned for the main Separation Rapids lithium resource.

*The geological and technical information contained in this news release has been reviewed and approved by Don Bubar P. Geo. (ONT) and President & CEO, Avalon Advanced Materials, qualified person for the purposes of National Instrument 43-101.*

### **About Avalon Advanced Materials Inc.**

Avalon Advanced Materials Inc. is a Canadian mineral development company focused on technology metals and minerals. 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](mailto:ir@AvalonAM.com), or phone Don Bubar, President & CEO at 416-364-4938.

*This news release contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities legislation. Forward-looking statements include, but are not limited to, statements that the mineralogy of the Separation Rapids resource provides opportunities to produce both lithium carbonate, lithium hydroxide and petalite, that lepidolite and petalite will need to be concentrated separately, that concentrates of lepidolite are attracting increasing interest as a feedstock for production of lithium carbonate, that Lepidico now contemplates building a facility in Ontario, that the Avalon facility would include a circuit to produce lithium hydroxide from petalite, that once off-take commitments are secured that define the priority lithium product lines, the Company can finalize the design and engineering of the Phase 1 production facility, that few advanced lithium projects are ready to initiate production, that the Company is well-positioned to bring a new supply to the market to serve priority customers once project financing is in place, that the summer drilling program confirmed the potential for discovery of additional lithium pegmatite resources, that the Company does not anticipate any delays in securing the necessary permits and approvals to proceed with the Phase 1 production facility, that further drilling is planned in order to increase the total lithium resources, that reginal targets can be tested in the same program as the deeper drilling planned for the Separation Rapids resource. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "potential", "scheduled", "anticipates", "continues", "expects" or "does not expect", "is expected", "scheduled", "targeted", "planned", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be" or "will not be" taken, reached or result, "will occur" or "be achieved". Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Avalon to be materially different from those expressed or implied by such forward-looking statements. Forward-looking statements are based on assumptions management believes to be reasonable at the time such statements are made. Although Avalon has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to market conditions, and the possibility of cost overruns or unanticipated costs and expenses as well as those risk factors set out in the Company's current Annual Information Form, Management's Discussion and Analysis and other disclosure documents available under the Company's profile at [www.SEDAR.com](http://www.SEDAR.com). There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Such forward-looking statements have been provided for the purpose of assisting investors in understanding the Company's plans and objectives and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking statements. Avalon does*

*not undertake to update any forward-looking statements that are contained herein, except in accordance with applicable securities law*