



November 5, 2024

Avalon Enters into Strategic Collaboration with Qualcomm for Mining Innovation and Technology Solutions in Canada

Toronto, Ontario - Consistent with its strategy to become a leading North American vertically integrated lithium producer, [Avalon Advanced Materials Inc.](#) ("Avalon" or the "Company") (TSX: [AVL](#) and OTCQB: [AVLNF](#)), is pleased to announce it has signed a memorandum of understanding with Qualcomm Technologies Inc. (the "MOU") on a strategic collaboration focused on Avalon's Thunder Bay lithium processing facility, advancing cutting-edge digital solutions that enhance operational efficiency and optimize data management.

Under the MOU, Avalon intends to leverage Qualcomm Technologies' Industrial & Edge technologies to create a robust digital infrastructure to support mining activities across Avalon's operations. The collaboration will involve developing a strategic roadmap for Internet-of-Things (IoT)- enabled solutions, with an emphasis on commercialization over the next few years.

Additionally, this collaboration will solidify the province's position as a hub for technological advancement in mining by fostering an ecosystem of Ontario-based technology small and medium enterprises (SMEs) to support the digital transition in Canada's critical minerals sector.

Scott Monteith, CEO of Avalon, commented, "Globally, the mining sector is undergoing a process of evolution in its practices and operations. By integrating Qualcomm Technologies' cutting-edge IoT and AI solutions into our Thunder Bay lithium project, we aim to set a new standard for digitalization in Canada. This partnership cultivates a stronger ecosystem of forward-thinking technology companies poised to accelerate data-driven advancements and strengthen Canada's critical minerals supply chain."

This MOU supports the broader adoption of innovation across the critical minerals sector, serving as a stepping stone toward Ontario's and Canada's shared goal of creating a modernized, technology-driven mining industry. Through this strategic collaboration, Avalon aligns with national aspirations to integrate advanced science and technology into every phase of the mineral development cycle, enhancing competitiveness, environmental performance, and operational efficiency.

"We are thrilled to collaborate with Avalon on this strategic initiative, which underscores our commitment to driving digital transformation in the mining industry," said Dev Singh, Vice President, Business Development, Qualcomm Technologies, Inc. "By leveraging our advanced Industrial & Edge technologies, we aim to empower Avalon's operations with sophisticated IoT solutions. This collaboration will enhance their operational efficiency, improve worker safety, and optimize data management capabilities, all while helping to achieve their sustainability goals."

By laying the groundwork for transformative technologies, this collaboration fosters a more effective mining innovation ecosystem. Focused on driving technological advancements, it builds on Canadian leadership in mining innovation while leveraging the country's highly skilled workforce. This approach establishes a robust foundation for the industry's future, ensuring a resilient and sustainable mining sector for years to come.

As a next step, Qualcomm Technologies and Avalon will be hosting a Mining Innovation and Technology Roundtable in Toronto on November 13, 2024 with invited guests.

About Avalon Advanced Materials Inc.

Avalon Advanced Materials Inc. is a Canadian advanced manufacturing company focused on vertically integrating the Ontario lithium supply chain. The Company, through its joint venture with SCR-Sibelco NV, is currently developing its Separation Rapids lithium deposit near Kenora, ON, while also continuing to advance the Snowbank lithium and Lilypad lithium-caesium projects. Avalon is also working to develop its Nechalacho rare earths and zirconium project located in the Northwest Territories. This deposit contains critical minerals for use in advanced technologies in the communications and defense industries among other sectors. In addition to these upstream activities, Avalon is executing on a key initiative to develop Ontario's first midstream lithium hydroxide processing facility in Thunder Bay, ON, a vital link bridging the lithium resources of the north with the downstream EV battery manufacturing base in the south.

For questions, please email the Company at IR@AvalonAM.com or contact Ms. Rachel Naji, Investor Relations Associate at 416-364-4938.

Cautionary Statement Regarding Forward-Looking Information

This news release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes but is not limited to statements related to the integration of Qualcomm's solutions with the Project. That through this strategic collaboration, Avalon aligns with national aspirations to integrate advanced science and technology into every phase of the mineral development cycle, enhancing competitiveness, environmental performance, and operational efficiency and that this collaboration fosters a more effective mining innovation ecosystem, focused on driving technological advancements, it builds on Canadian leadership in mining innovation while leveraging the country's highly skilled workforce and that this approach establishes a robust foundation for the industry's future, ensuring a resilient and sustainable mining sector for years to come. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "add" or "additional", "advancing", "anticipates" or "does not anticipate", "appears", "believes", "can be", "conceptual", "confidence", "continue", "convert" or "conversion", "deliver", "demonstrating", "estimates", "encouraging", "expand" or "expanding" or "expansion", "expect" or "expectations", "forecasts", "forward", "goal", "improves", "increase", "intends", "justification", "plans", "potential" or "potentially", "promise", "prospective", "prioritize", "reflects", "robust", "scheduled", "suggesting", "support", "top-tier", "updating", "upside", "will be" or "will consider", "work towards", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", or "will be taken", "occur", or "be achieved".

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including risks associated with project development such as: environmental hazards and economic factors as they affect the cost and success of the Company's capital expenditures, the ability of the Company to obtain required permits and approvals, the ability of the Company to obtain financing, , the

ability to source feedstock for the Company's proposed lithium processing facility at reasonable prices or at all, the price of lithium hydroxide, no operating history, no operating revenue and negative cash flow, land title risk, the market price of the Company's securities, the Company's commercial viability, inflation and uncertain global economic conditions, uncertain geo-political shifts and risks, successful collaboration with indigenous communities, future pandemics and other health crises, dependence on management and other highly skilled personnel, , extensive government and environmental regulation, reliance on artificial intelligence technology to influence mining operations, volatility in the financial markets, uninsured risks, climate change, threat of legal proceedings, as well as those risk factors discussed or referred to in the annual information form of the Company dated November 28, 2023 (the "AIF") under the heading "Description of the Business – Risk Factors". Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Although the Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable, undue reliance should not be placed on forward-looking information because the Company can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions identified in the AIF, assumptions have been made regarding, among other things: management of certain of the Company's assets by other companies or joint venture partners, the Company's ability to carry on its project activities without undue delays or unbudgeted costs, the ability of the Company to obtain sufficient qualified personnel, equipment and services in a timely and cost-effective manner, the ability of the Company to operate in a safe, efficient and effective manner, the ability of the Company to obtain all necessary financing on acceptable terms and when needed, the accuracy of the Company's operational and price assumptions on which these are based and the continuance of the regulatory framework regarding environmental matters. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions that may have been used. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.