

PIEDMONT LAUNCHES DFS FOR INTEGRATED BUSINESS

Enhancements to Lower Carbon Footprint and Improve Economics Feature Adoption of Metso Outotec Advanced Lithium Conversion Technology

- Launching definitive feasibility study ("DFS") of our integrated lithium hydroxide project in North Carolina
 - o Expected to be completed in Q3 2021
- Metso Outotec advanced lithium conversion technology improves environmental footprint and economics
 - o Significantly reduced CO₂ emissions vs. Chinese conversion of Australian concentrate
 - o Potential for lower capital and operating costs due to streamlined flowsheet and lower reagent usage
- DFS will include initiatives to further improve the ESG profile of our North Carolina operations
 - o Solar generating capacity added to business scope to offset carbon emissions
 - o Replacement of mine fleet with in-pit crushing and conveyor systems will reduce emissions and noise
- Updated Scoping Study expected in May 2021 will preview results of environmental and economic initiatives
 - o Potentially larger production profile responding to continued strong lithium demand
 - Mineral resource update anticipated in April 2021 incorporating ongoing exploration drilling
 - o Expanded production of by-product quartz, feldspar, and mica
 - Reflects discussions with prospective customers
 - By-products reduce manufacturing waste while raising potential revenue through new markets

Keith D. Phillips, President and Chief Executive Officer, said, "Demand for locally and ethically-sourced battery raw materials is accelerating, and Piedmont is engaging in multiple initiatives to meet this opportunity in the most sustainable way possible. With the backdrop of new executive orders supporting domestic battery supply chains, we are very pleased to launch an integrated definitive feasibility study to advance our North Carolina operations. In adopting the innovative Metso Outotec process we hope to deliver enhanced DFS economics while also positioning the Piedmont Lithium Project to have a lower environmental impact than any of the lithium hydroxide projects currently operating and under construction around the world.

"As the only spodumene-to-hydroxide lithium project in the United States, Piedmont is at the nexus of three important mega-trends – the 'electrification of everything', the 'localization of supply chains', and 'the decarbonization of the economy'. As our DFS progresses we will continue to engage in discussions with prospective customers and strategic investors to optimally position our North Carolina operations for development later this year."

This announcement has been authorized for release by the Chief Executive Officer.

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Integrated Definitive Feasibility Study with Metso Outotec Alkaline Pressure Leach Technology

We are pleased to announce the commencement of a Definitive Feasibility Study ("DFS") for our integrated North Carolina lithium hydroxide operations to include Metso Outotec's innovative alkaline pressure leach technology. The integrated DFS will incorporate the work currently underway on our concentrate operations, with Metso Outotec joining our technical team which currently includes Primero Group and Marshall Miller and Associates.

Using Metso Outotec's technology, which omits the acid roasting step of conventional spodumene conversion, air emissions from the chemical operations are expected to be reduced compared with our prior studies, and importantly, consumption of sulfuric acid and sodium sulfate waste products will be eliminated. The DFS will also evaluate enhancements to our Carolina operations including installation of solar generating capacity, in-pit crushing systems, and elimination of haul trucks from our operations plan, all of which are expected to improve both carbon emissions and project economics.

The DFS is scheduled to be completed by the end of the third quarter of 2021. Given the integrated nature of our business model, we will not publish a stand-alone DFS for the concentrate operations. The Company will update investors with a preliminary economic assessment of the integrated business including the Metso Outotec technology as well as updated Mineral Resource estimates within Q2 2021.

Construction of the concentrate operations is anticipated to be completed by the end of 2022, and the chemical plant is anticipated to be completed in 2023.



About Piedmont Lithium

Piedmont Lithium (Nasdaq:PLL; ASX:PLL) is developing a world-class integrated lithium business in the United States, enabling the transition to a net zero world and the creation of a clean energy economy in America. Our location in the renowned Carolina Tin Spodumene Belt of North Carolina, the cradle of the lithium industry, positions us to be one of the world's lowest cost producers of lithium hydroxide, and the most strategically located to serve the fast-growing US electric vehicle supply chain. The unique geographic proximity of our resources, production operations and prospective customers places us on the path to be among the most sustainable producers of lithium hydroxide in the world and should allow Piedmont to play a pivotal role in supporting America's move to the electrification of transportation and energy storage. For more information, visit www.piedmontlithium.com.

Forward Looking Statements

This announcement may include forward-looking statements. These forward-looking statements are based on Piedmont's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Piedmont, which could cause actual results to differ materially from such statements. Piedmont makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources

The Project's Core Property Mineral Resource of 25.1Mt @ 1.13% Li₂O comprises Indicated Mineral Resources of 12.5Mt @ 1.13% Li₂O and Inferred Mineral Resources of 12.6Mt @ 1.04% Li₂O. The Central property Mineral Resource of 2.80Mt @ 1.34% Li₂O comprises Indicated Mineral Resources of 1.41Mt @ 1.38% Li₂O and Inferred Mineral Resources of 1.39Mt @ 1.29% Li₂O. The information contained in this announcement has been prepared in accordance with the requirements of the securities laws in effect in Australia, which differ from the requirements of U.S. securities laws. The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are Australian terms defined in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). However, these terms are not defined in Industry Guide 7 ("SEC Industry Guide 7") under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), and are normally not permitted to be used in reports and filings with the U.S. Securities and Exchange Commission ("SEC"). Effective January 1, 2021, the SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act. Issuers are not required to comply with such rules until their first fiscal year beginning on or after January 1, 2021. Under the new rules the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding definitions under the JORC Code. However, information contained herein that describes Piedmont's mineral deposits may not be comparable to similar information made public by U.S. companies subject to reporting and disclosure requirements under the U.S. federal securities laws and the rules and regulations thereunder. U.S. investors are urged to consider closely the disclosure in Piedmont's Form 20-F, a copy of which may be obtained from Piedmont or from the EDGAR system on the SEC's website at http://www.sec.gov/.

Competent Persons Statement

The information in this announcement that relates to Exploration Results, Metallurgical Testwork Results, Exploration Targets, Mineral Resources, Concentrator Process Design, Concentrator Capital Costs, Concentrator Operating Costs, Mining Engineering and Mining Schedule is extracted from the Company's ASX announcements dated July 23, 2020, May 26, 2020, June 25, 2019, April 24, 2019, and September 6, 2018 which are available to view on the Company's website at www.piedmontlithium.com. Piedmont confirms that: a) it is not aware of any new information or data that materially affects the information included in the original ASX announcements; b) all material assumptions and technical parameters underpinning Mineral Resources, Exploration Targets, Production Targets, and related forecast financial information derived from Production Targets included in the original ASX announcements continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially modified from the original ASX announcements.