Form 51–102F3
MATERIAL CHANGE REPORT

Item 1. Name and Address of Company

Hertz Lithium Inc. (the "**Company**")
1500 – 1055 West Georgia Street
Vancouver, BC V6E 4N7

Item 2. Date of Material Change

December 21, 2023

Item 3. News Release

A news release announcing the material change described herein were disseminated through Newsfile and concurrently filed on SEDAR+ on January 9, 2024.

Item 4. Summary of Material Change

On December 21, 2023, the Company entered into a license agreement (the "**License Agreement**") with Penn State Research Foundation (the "**PSRF**") pursuant to which the Company acquired licenses in connection with the use of the PSRF's patent-pending process for extraction of lithium from alpha-spodumene.

Item 5. Full Description of Material Change

5.1 Full Description of Material Change

Pursuant to the License Agreement, the PSRF has granted the Company a royalty-bearing exclusive license (the "**Patent Rights License**") to the PSRF's patent-pending process for extraction of lithium from alpha-spodumene (the "**Technology**").[1] Further, pursuant to the License Agreement the PSRF has granted the Company a royalty-bearing non-exclusive license to certain know-how (the "**Know-How**") necessary to derive the benefits of the Patent Rights (the "**Know-How License**" and together with the Patent Rights License, the "**Licenses**"). The Company maintains the right to sublicense the Licenses under the License Agreement to third parties.

The Technology comprises a patent-pending process for the extraction of lithium from alpha-spodumene. Lithium is one of the critical elements with widespread applications in next-generation technologies,

[1] Rezaee, M., Vaziri Hassas, B., Akbari, H., Agrawal, D., and Slawecki, T. (2021). Process for Extraction of Lithium. International Patent Application Number: WO2021155224A1.

including energy storage, electric mobility and cordless devices.[2] Due to its unique applications, lithium cannot be substituted in most applications; therefore, a steady increase of 8-11% in annual demand is anticipated.[3] Meeting a rising demand for lithium requires prospecting and processing all viable resources. Two primary sources of lithium are hard rock ores (e.g., spodumene mineral) and brine, with clay sources considered secondary. Spodumene mineral is the major source of high-purity lithium; however, current technologies do not allow leaching of lithium from alpha-spodumene, and therefore most of the methods of lithium extraction from spodumene are focused on modifying the crystal structure of concentrated spodumene mineral into beta-spodumene using conventional heating (roasting) at 950-1100 degrees Celsius. However, such high-temperature roasting processes are very energy intensive and have been the bottleneck of the economic extraction of lithium from ores. Thus, there is a need for more energy-efficient and environmentally friendly methods for a high-yield extraction of lithium. The Technology is designed to satisfy these needs.[45]

The Technology begins with taking spodumene concentrate, introducing sodium hydroxide, and then proceeding with conventional or microwave roasting which transforms the alpha-spodumene into a soluble phase. Next, the water leaching is currently used to recover up to 95% of the water-soluble lithium.

5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 6. Reliance on subsection 7.1(2) of National Instrument 51–102

Not applicable.

Item 7. Omitted Information

None.

Item 8. Executive Officers

Kal Malhi
Chief Executive Officer and Director
Cell: 604-805-4602
E-mail: kal@bullruncapital.ca

Item 9. Date of Report

DATED at Vancouver, BC, this 9th day of January, 2024.

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2 Meshram, P., Pandey, B. D., & Mankhand, T R. (2014) "Extraction of lithium from primary and secondary sources by pre-treatment, leaching and separation: A comprehensive review. Hydrometallurgy," 150, 192-208.; Martin, G., Rentsch, L., Hoeck, M, & Bertau, M (2017). "Lithium market research-global supply, future demand and price development." Energy Storage Materials, 6, 171-179.
3 Baylis, R, 2013, January. "Evaluating and forecasting the lithium market from a value perspective." In Roskill presentation, 5 the Lithium Supply and Markets Conference, Las Vegas (pp. 29-31); ENTR, E (2014). "Report on Critical Raw Materials for the EU Ares" (2015), 1819503.
4 Shihua, H., Daulet, S., Pan, J., Vaziri Hassas, B., Akbari, H., Mensah-Biney, R. Rezaee, M.*, (2022). Direct Extraction of lithium from α-spodumene by salt roasting-leaching process. ACS Sustainable Chemistry and Engineering.
5 Rezaee, M., Shihua, H., Daulet, S., Vaziri Hassas, B., Slawecki, T. M., Agrawal, D., Akbari, H., Mensah-Biney, R. (2022). Microwave-assisted calcination of spodumene for efficient, low-cost, and environmentally friendly extraction of lithium. Powder Technology, 397, 116992.

Cautionary Statement Regarding "Forward-Looking" Information

This material change report includes certain statements that may be deemed "forward-looking statements". All statements in this material change report, other than statements of historical facts, that address events or developments that the Company expects to occur, are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential" and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include market prices, continued availability of capital and financing, and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Forward-looking statements are based on the beliefs, estimates and opinions of the Company's management on the date the statements are made. Except as required by applicable securities laws, the Company undertakes no obligation to update these forward-looking statements in the event that management's beliefs, estimates or opinions, or other factors, should change.