

**12 December 2016**

## ASX ANNOUNCEMENT

### LITHIUM AUSTRALIA (ASX: LIT) AWARDS SILEACH™ LARGE-SCALE PILOT PLANT DESIGN TO CPC PROJECT DESIGN PTY LTD

Lithium Australia (ASX: LIT) has advanced commercialisation of the revolutionary Sileach™ process for the recovery of lithium from silicates, by committing to engineering design.

- Engineering study awarded to CPC Project Design Pty Ltd (“CPC Engineering”)
- Design plant output 2,500tpa lithium carbonate
- Deliverables to include capital and operating cost estimates
- Scheduled completion April 2017
- Commitment to design advances LIT’s commercialisation agreement with Pilbara Minerals

#### PATH TO COMMERCIALISATION

Commercial development of the Sileach™ process involves progressive de-risking and demonstration of the ability to scale up from laboratory tests through to commercial production.



Figure 1. LIT’s path to commercial production

#### Sileach™ can rapidly digest any silicate mineral.

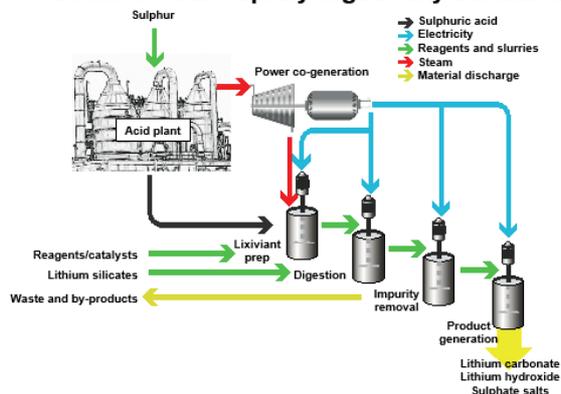


Figure 2. The Sileach™ process

The revolutionary Sileach™ process is designed to recover lithium and other metals from any silicate, including spodumene, lithium micas, petalite, amphiboles, pyroxenes, tourmalines etc. The award of engineering design to CPC Engineering has propelled Lithium Australia along the path to commercialisation. Design studies will commence in December 2016 and will be an integral part of LIT’s decision process to proceed with plant construction. The Sileach™ process is undergoing independent development and testing with our partners ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation).

## PROJECT DELIVERABLES

CPC Engineering will provide LIT with engineering design, capital cost estimates, operating cost estimates and comparative logistic costs of a number of Western Australian sites.

Port Hedland remains a location of high priority to provide LIT with the greatest flexibility in servicing its requirements under the terms of LIT's commercialisation agreement with Pilbara Minerals (ASX:PLS) which was [announced on 28 June 2016](#). Successful large-scale pilot testing may lead to a 50/50 joint venture (the "Sileach JV") between LIT and Pilbara Minerals to process spodumene from Pilbara Minerals' Pilgangoora deposit which is located only 120km south of Port Hedland.

## FURTHER RESEARCH AND TESTWORK

LIT and ANSTO have scheduled further pilot testing later this month and in January 2017 to process spodumene concentrates from Pilbara Minerals' Pilgangoora deposit. Work has commenced at Murdoch University, funded by a research grant from the Minerals Research Institute of Western Australia. That work will focus on impurity deportment, and maximising the value of by-product credits.

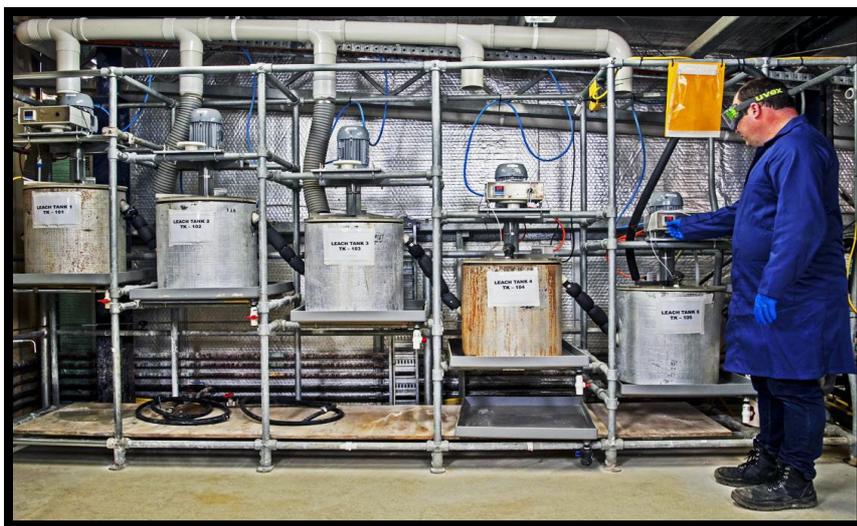


Figure 3. Pilot plant in operation at ANSTO Minerals

## STATEMENT FROM THE MANAGING DIRECTOR

LIT's managing director, Adrian Griffin commented:

*"The progression from the first laboratory tests, to awarding the engineering contract has all been encapsulated in 2016, the most progressive year in Lithium Australia's history. The commitment of our partners at ANSTO Minerals and Murdoch University, and support by grants from the federal and state governments has been paramount in this development.*

*The decision to award the engineering contract to CPC Engineering retains much of the financial and intellectual property benefit in Western Australia, and maintains our scheduled target for commercialisation of the Sileach™ process."*

### Adrian Griffin

Managing Director

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### About Lithium Australia

Lithium Australia NL is a dedicated developer of disruptive lithium extraction technologies, and 100% owner of the Sileach™ process for the recovery of lithium from silicates. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory. LIT aspires to create the union between resources and the best available technology and to establish a global lithium processing business.

### MEDIA CONTACT:

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