

ASX RELEASE

27 October 2017

Activity Report for the Quarter ended September 2017

Lithium Power International Limited (ASX: LPI) ("LPI" or "the Company") is pleased to submit this Quarterly Activity Report for the period ended 30 September 2017.

HIGHLIGHTS

- 5% lithium concentration successfully achieved in Maricunga stage 1 process test work with stage 2 test work well underway and first production of Li_2CO_3 and KCl (test samples) expected by the end of December 2017.
- The process flow sheet (Appendix A) is now subject to final optimisation.
- Advanced production testing of the lithium and potash extraction processes continues at the pilot plant stage, using tier-1 equipment suppliers Veolia, GEA, Andritz and FLSmidth and certified laboratories using brine and salts from the Maricunga project site pilot ponds.
- The production process utilizes conventional brine processing technology, consisting of evaporation ponds for brine concentration and proven processes on the concentrated brine, to minimise uncertainty over future operations. The process will produce lithium carbonate with potash (KCl) as an additional product once the lithium operation is established. Engineering and plant design is well advanced for the Maricunga lithium project feasibility study.
- Geotechnical site investigation testing (pits, drilling) has been completed on the plant and pond sites to provide information for construction engineering design. The layout design of the ponds for brine evaporation is also nearing completion.
- The company signed a term sheet with Albertson Resources Pty Ltd to sell the Centenario lithium project in Argentina for a total of A\$3.75M, with a 1.5% gross royalty. The initial payment of A\$150,000 has been received, with an A\$850,000 cash payment due on entry into the long form agreement and A\$2.75M in cash or a total of A\$3M, a mixture of A\$1.5M in cash and A\$1.5M in shares, should the buyer opt for a cash/shares settlement.
- NI43-101 report released providing additional details on the updated Maricunga resource estimate, that resulted in a 3.7 fold increase of high grade Measured, Indicated and Inferred resource to 2.15Mt of lithium carbonate equivalent (LCE) and 5.7Mt potassium chloride (KCl) to a depth of 200m (reported in accordance with JORC Code (2012) on 12 July 2017).

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MARICUNGA – CHILE JOINT VENTURE

MAJOR EXPANSION OF THE MARICUNGA LITHIUM BRINE RESOURCE

The Maricunga project (MJV) is located in northern Chile, the region which is home to the largest and highest-grade lithium brine mines globally at the Salar de Atacama and source of the world's lowest cost lithium production.

Maricunga is regarded as one of the highest quality pre-production lithium brine projects in the world. The Lito 1-6 properties in the Maricunga salar (salt lake) were subject to significant past exploration by our Joint Venture partners.

The 2016-17 drilling program was undertaken to expand the resource on all the MJV properties. This resulted in a newly expanded mineral resource estimate for the combined property package (Table 1), reported in accordance with the JORC Code (2012) and estimated by a Competent/Qualified Person as defined by the JORC (Australia) Code and NI43-101 reporting requirements. The 2016–17 program expanded the resource 3.7 fold through discovery of higher porosity sediments in the more recently acquired properties and below the previously explored depth of 150m depth, by drilling 200m deep holes. 80% of the updated resource is categorised in the Measured and Indicated categories, with the remaining 20% in the Inferred category, for a total 2.15Mt of lithium carbonate equivalent (LCE) resource defined to only 200m. The deep hole (S19) drilled to 360m encountered lithium brine over the full distance and together with geophysics suggests the sediments hosting brine extend to a depth of 400m or more has been used to define an exploration target below the resource.

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During the quarter the company released an NI43-101 report providing additional information regarding the updated July 2017 resource and activities underway on the Maricunga project. In addition to a favourable high grade resource base the technical team confirmed the very positive porosity and permeability characteristics of sediments hosting the brine for future extraction. With these excellent characteristics the Maricunga project is moving forward as quickly as possible to complete the project feasibility studies with the goal of becoming a world class low cost lithium producer.

TABLE 1: JULY 2017 MARICUNGA JV MINERAL RESOURCE ESTIMATE

ELEMENT	Measured		Indicated		Inferred		Measured+Indicated		Total Resource	
	Li	K	Li	K	Li	K	Li	K	Li	K
Area km ²	18.88		6.76		14.38 [^]		25.64		25.64	
Aquifer volume km ³	3.06		1.35		0.72		4.41		5.13	
Brine volume km ³	0.15		0.14		0.06		0.30		0.36	
Mean drainable porosity % (Specific yield)	5.02		10.65		8.99		6.75		7.06	
Mean grade g/m ³ of aquifer	56	409	114	801	114	869	74	529	79	577
Mean concentration mg/l	1,174	8,646	1,071	7,491	1,289	9,859	1,143	8,292	1,163	8,512
Resource tonnes	170,000	1,250,000	155,000	1,100,000	80,000	630,000	325,000	2,350,000	405,000	2,980,000
Lithium Carbonate Equivalent tonnes	900,000		820,000		430,000		1,720,000		2,150,000	
Potassium Chloride tonnes	2,400,000		2,100,000		1,200,000		4,500,000		5,700,000	

Lithium is converted to lithium carbonate (Li₂CO₃) with a conversion factor of 5.32. Values may not add due to rounding. No cut-off grade is applied in the resource.

Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91

[^] Inferred underlies the Measured in the Lito properties

PROJECT LOGISTICS

The project is very well supported with existing infrastructure, being located beside a well maintained international road crossing from Chile to Argentina, having adjacent electricity transmission lines and by having cellular phone coverage. The project also has the option of utilising a number of coastal port options. The project is just three (3) hours from the Northern Chilean mining support centre of Copiapo, where a wide range of support services to the mining industry are available.

BRINE SUPPLY

The critical groundwater modelling study of future lithium brine extraction from the project properties is well underway. This model is needed to generate a production schedule and to optimise the location and number of brine production wells for the project.

POWER SUPPLY

The MJV is at an advanced stage evaluating the power supply options for the project, having received studies from consultants with experience working with mining projects in Chile. Options include grid power supply located relatively closely to the project, on-site renewable energy supply and on-site diesel generation of electricity. Evaluations of all options are continuing.

ON-SITE BRINE EVAPORATION TESTING

Field evaporation test work continues in ponds at the Maricunga project site, providing valuable information regarding brine evolution under site environmental conditions. The project weather station continues to provide important information on local evaporation conditions. A year of information from the evaporation ponds is now available.

OFF-SITE BRINE PROCESS TEST WORK

Process test work is continuing with world-class equipment suppliers Veolia and GEA to optimise the lithium extraction process and minimise the cost of capital equipment and the future operating costs. Studies continue on the brine concentration in the evaporation ponds and optimisation of chemical reagent usage, to minimize the project operating costs and maximise productivity. The process will use proven technology and processing methods to minimise



Figure 1: Maricunga pilot ponds

uncertainties over the production and construction costs. Potash (KCL) tests on salar brine have also been successfully completed by consultancy Andritz, who have extensive experience with potash brine projects.

Lithium brine has been extracted from salars in Chile and Argentina for over 34 years for production of lithium chemicals and the technology is well understood, although some differences in process are required for each project reflecting the unique brine chemistry of each salar.

EVAPORATION POND DESIGN

Geotechnical testing and site evaluation has been undertaken in the area where the ponds will be constructed to finalise pond design for the feasibility studies. The project will use the well-established method of evaporation in ponds to precipitate salts (predominantly NaCl – common salt) and to concentrate the brine, before final processing to produce lithium carbonate for sale.

Tier-1 engineering consultancy Worley Parsons has designed the ponds, which will be constructed on an acquired site off, but close to the salar. The location chosen is where the ponds can be constructed taking advantage of local material that can be easily constructed into the pond embankments prior to lining with impermeable liner material.

INFRASTRUCTURE DESIGN

Preliminary designs have been received from Worley Parsons for the project camp to house contractors during the construction and also during the life of mine, in addition to advances with the design for the processing plant and associated infrastructure. The brine extraction wellfield detailed design will evolve from the groundwater model being developed by the groundwater consultancy group working on the project since 2011.

PROJECT ENGINEERING DESIGN AND PRE-FEASIBILITY STUDY

Engineering design consultancy group WorleyParsons is designing the process plant and other site infrastructure for the MJV project. WorleyParsons are well advanced with the design for the process plant and associated infrastructure, as well as the estimation of capital and operating costs. The project preliminary economic assessment is expected to be completed by Q4 2017. Additional advice is to be provided by Veolia and GEA for equipment selection and costing. Appendix A (below) details the process workflow diagram developed by WorleyParsons.

ENVIRONMENTAL STUDIES

Environmental baseline studies continue, adding to the substantial volume of environmental data previously collected for the project, dating back to 2011. For the most recent part of the project baseline assessment summer, autumn and winter data has now been collected during 2016 and 2017, including flora, fauna, hydrology and hydrogeology data.

The groundwater model forms a key input to the project environmental assessment investigation (EIA), evaluating the response of the groundwater system in the salar to future pumping by the MJV. The MJV properties are located in the north of the Maricunga salar, furthest from the area of major surface water inflows where limited flora and fauna are observed.

The groundwater modelling simulation will be used to optimise the location of brine pumping wells to minimise environmental impacts of the project. The environmental data collection is leading up to the submission of the EIA in early 2018, incorporating details of the groundwater model. Consultants with extensive experience interacting with government departments and with a history of successfully obtaining environmental approvals are conducting the environmental assessment and are preparing the comprehensive EIA documentation.

COMMUNITY RELATIONS

The MJV has identified the local community groups in the vicinity of the project and is working with them, no matter how remote they are from the project. The MJV project is taking all community aspects very seriously to ensure that community concerns will, if applicable, be addressed carefully in the project design, and development. The MJV is also in discussions with the local provincial town councils regarding the impacts of increased traffic movement, employment and other aspects of the project.

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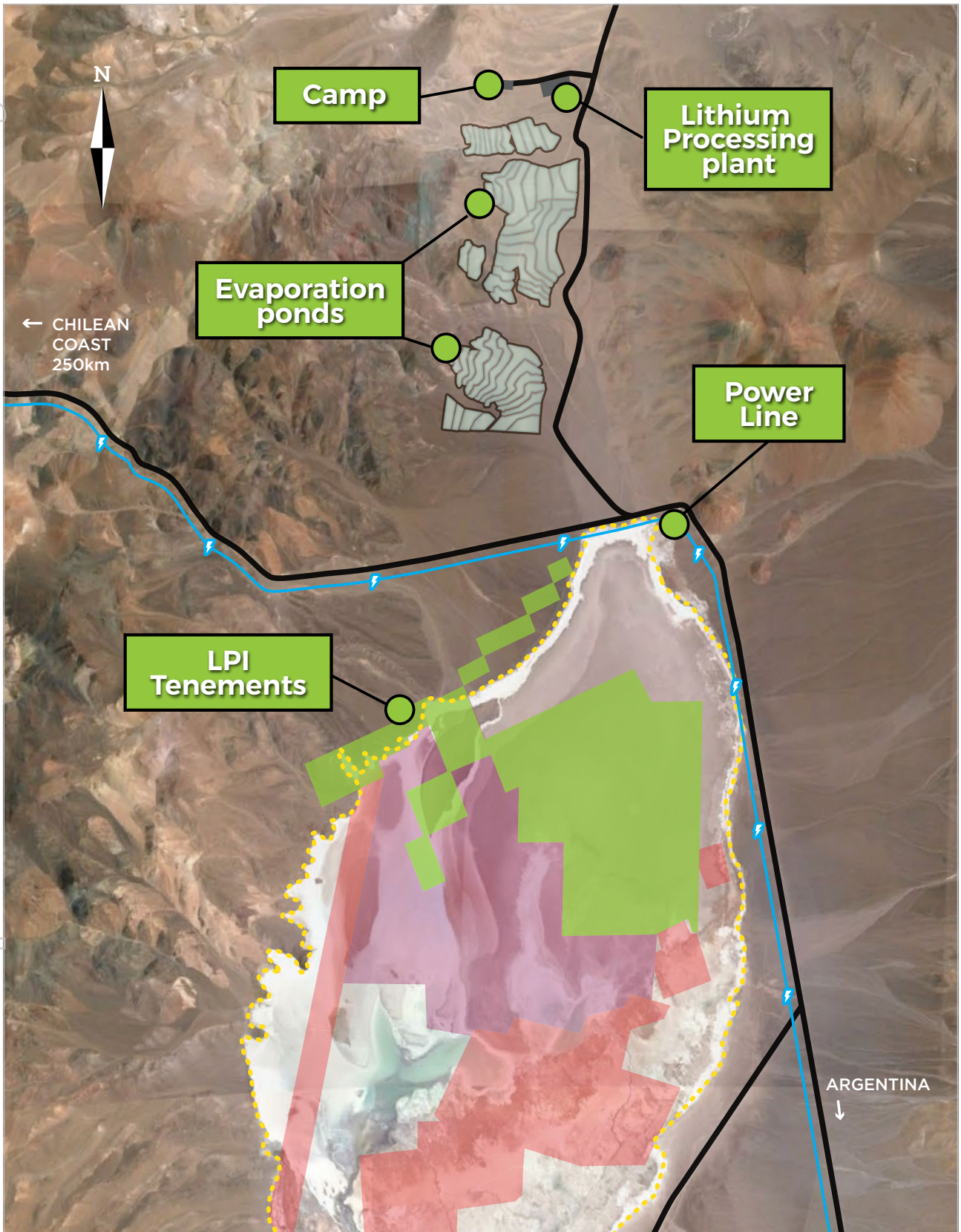


Figure 2: Location of properties and planned infrastructure at the Maricunga project

OTHER PROJECTS

PILGANGOORA – PILBARA

The 100% owned granted Pilgangoora tenement (E45/4610) is situated adjacent to the Pilbara Minerals and Altura Mining lithium pegmatite deposits which combined form one of the largest global lithium pegmatite resources. These projects are currently being developed into lithium mines, for production of Spodumene lithium concentrate. Lithium power is exploring for similar lithium pegmatites in a continuation of the same sequence of host rocks immediately west of these companies.

PILGANGOORA DRILLING PROGRAM

During this quarter the reconnaissance drilling program was completed at Pilgangoora, comprising 35 reverse circulation holes totalling 2,410m. This preliminary drilling program was undertaken in different areas across the tenement to drill test potential greenstone host rocks for lithium pegmatites interpreted in the project aeromagnetic survey, as a significant area of the tenement is covered with shallow soil and alluvium.

Drilling encountered the interpreted greenstone units, which are the preferred host rock for lithium pegmatites in the Pilgangoora area. The drilling also intersected intervals of granitic to pegmatitic intrusives. Magnetic susceptibility (intensity) measurements were taken on the drill chips to better relate the observations from drilling to the high resolution aeromagnetic survey that was previously completed over the tenement.

The interpretation of the reconnaissance drilling did highlight additional areas of interest for lithium pegmatites and the company is actively collecting additional information in areas that were not covered by the reconnaissance drilling. Soil sampling has been undertaken to screen these areas for pegmatite lithium mineralisation. Samples were analysed for a broad suite of elements using the ICP analytical method and results are currently being evaluated.



Figure 3: Location of Lithium Power projects in Western Australia

TABBA TABBA & STRELLEY PROJECTS

The Tabba Tabba tenement is located 5km north along strike from the (now inactive) Pilbara Minerals Tabba Tabba Tantalum Mine. Field sampling from the Tabba Tabba tenement has identified pegmatitic intrusive on the eastern side of the range of hills that extends for several kilometres through the tenement, with large pegmatite outcrops in places. The initial rock chip and soil sampling shows weakly elevated concentrations of lithium and tantalum. Planning for a more in-depth geochemical sampling program and possibly a follow up drilling program for this area is now underway.

GREENBUSHES – SOUTHWESTERN WESTERN AUSTRALIA

A number of interesting areas have been identified through targeted rock and soil sampling programs and updated interpretation of existing geophysical data sets in the southern Greenbushes tenement E70/4774. Planning for an expanded and more in depth soil and rock sampling program is under way in this highly prospective area. Landowner permission is currently being sought to allow greater access to these areas with potential to host lithium pegmatites.

CENTENARIO – SALTA PROVINCE, ARGENTINA

The company has signed a term sheet with Albertson Resources Pty Ltd to sell the Centenario project in Salta province, Northern Argentina, for a total cash payment of A\$3.75M and a 1.5% gross royalty. The initial payment of \$A150,000 has been received from the purchaser as of the 6th of September 2017. A\$850,000 cash payment is due on entry into the long form agreement and A\$2.75M in cash at settlement. If the purchaser opts for settlement as a mix of cash and shares, then the total payment is increased by A\$250,000 for a total payment of A\$3M, 50% cash and 50% shares. A success fee is payable on finalization of a maiden JORC resource estimate on the property. A royalty of 1.5% is payable on gross revenue from Centenario for a period of 20 years from completion of a definitive feasibility study.

CORPORATE UPDATE

APPENDIX 5B

The Appendix 5B quarterly cashflow report for the quarter ended 30 September 2017, is submitted separately.

The Company currently had a cash balance of A\$3.1M as at 30 September 2017.

This amount is currently held in Company bank accounts in Australia, Chile and Argentina, in Australian Dollars, US dollars, Argentine Pesos and Chilean Pesos. The Australia dollar equivalents for these foreign currencies are converted at the closing foreign exchange spot rate on 30 September 2017.

In addition, through the Company's contributions to the Maricunga Joint Venture, the Joint Venture entity's bank accounts has A\$5.3M (US\$4.2M) as at 30 September 2017.

FINANCIAL STATEMENTS FOR FINANCIAL YEAR ENDED 30 JUNE 2017

The audited financial statements were approved by the Directors and signed off by the Company's Auditors, Ernst Young on 28 October 2017.

These financials statements along with the Appendix 4G – Corporate Governance statement were lodged with the ASX on this same date in compliance with the Company's annual reporting requirements.

ANNUAL GENERAL MEETING 2017

The Annual General Meeting ('AGM') is set for 10.30am Wednesday 15 November 2017.

The Notice of Meeting was dispatched to all shareholders on or about Thursday 12 October 2017.

Items of business to be considered by shareholders at for the AGM include four resolutions:

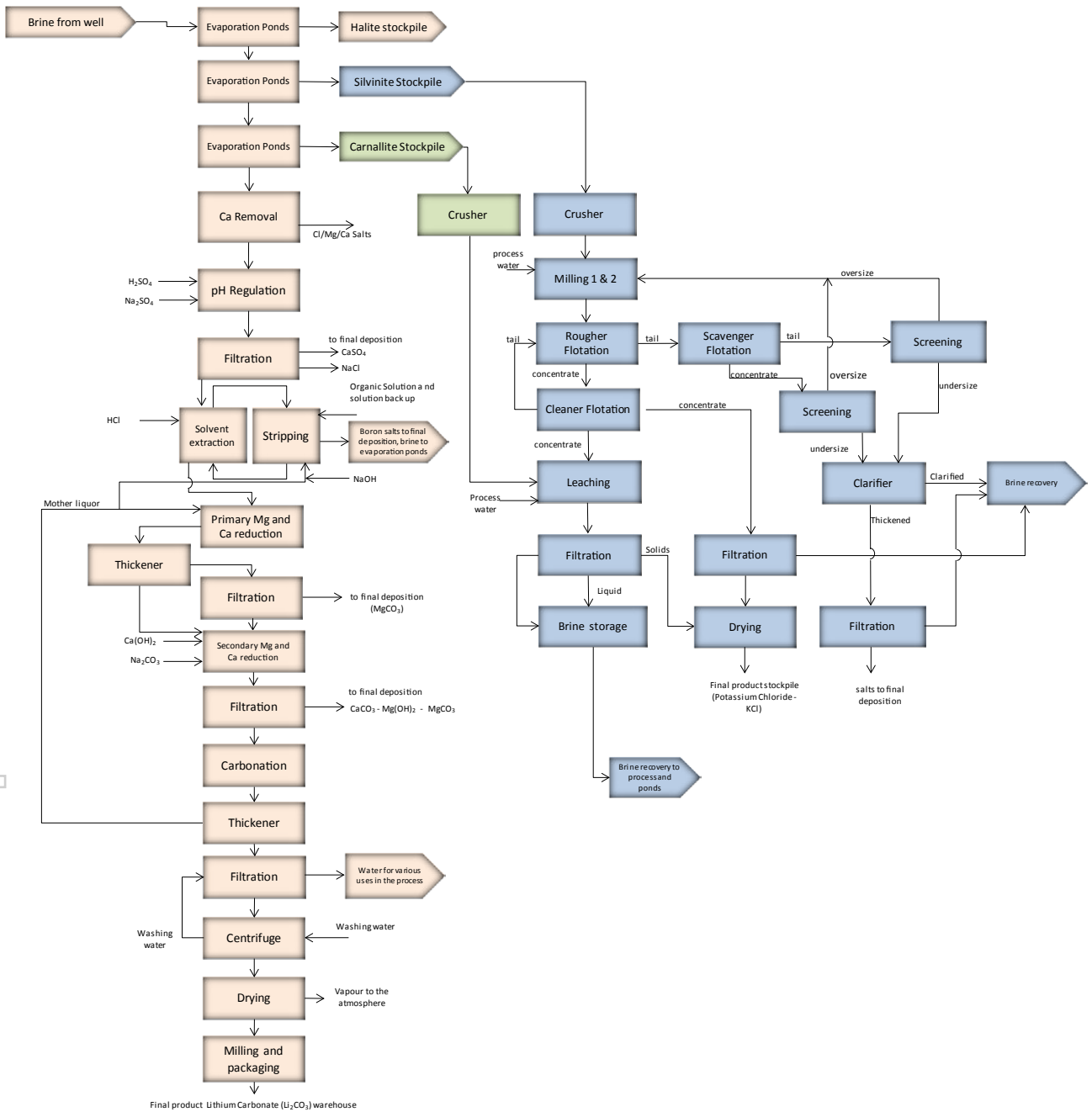
- the Approval of the Remuneration Report,
- the re-approval of the Placement Capability under ASX Listing Rule 7.1A; and
- the re-election of two Directors who retire by rotation.

All Shareholders are encouraged to attend the AGM or if unable to attend to lodge their proxy votes for the AGM by the due date of Monday 13 November 2017.

APPENDIX A WORLEYPARSONS PROCESS WORKFLOW DIAGRAM



Process Block Diagram - Lithium Carbonate and Potassium Chloride Plants



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