

## Key Work Streams Underway To Advance High Purity Manganese Pre-Feasibility Study

- Simulus Engineering contracted to undertake an approximately 600kg bulk leach test programme to further optimise process and produce samples for offtake discussions.
- Discussions continue with lithium ion battery manufacturers on required specifications and quantities as a prelude to offtake negotiations.
- Key adviser appointed to provide consulting support in relation to the optimal power strategy for the project including an assessment of renewable energy as part of the solution.
- Discussions with prospective advisors on project financing initiated and progressing.
- MBS environmental appointed to manage the environmental permitting process.
- Geotechnical assessment complete, final report pending. No significant issues identified.
- Native Title discussions initiated with Traditional Owner’s representatives.
- Groundwater exploration POW in place with work to commence on securing a suitable rig.
- Collaborative commercialisation agreement with CSIRO progressing.

Element 25 Limited (“E25” or “Company”) is pleased to advise that all key work streams are underway and progressing in relation to the Pre-Feasibility Study on the production of high purity manganese from the Company’s 100% owned Butcherbird Project (“Project”).

In early 2018, the Company completed a Scoping Study which concluded that the Project has the potential to support an economically robust development producing high purity manganese sulphate for the lithium ion battery markets as well as Electrolytic Manganese Metal for the more traditional specialty steel markets.

Based on these results the Company initiated a Pre-Feasibility Study to assess in more detail the pathway to commercialisation for this world class resource.

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### Company Snapshot

ASX Code:	E25	Board of Directors:		Element 25 Limited is developing the world class
Shares on Issue:	83.5M	Seamus Cornelius	Chairman	Butcherbird manganese project in Western Australia to
Share Price:	\$0.20	Justin Brown	ED	produce high purity manganese sulphate for lithium ion
Market Capitalisation:	\$16.7M	John Ribbons	NED	batteries and electrolytic manganese metal.
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The following appointments have been made and key work streams are under way:

### Metallurgy



Simulus has helped develop projects and conducted project assessments in over 25 countries around the world for over 75 companies. Their services span the entire product development lifecycle from simulation, laboratory testwork, engineering and modular and mobile plants. Simulus offers full, multidisciplinary engineering capability whilst maintaining a strong focus on the early stages of project development, including scoping, prefeasibility and bankable feasibility studies. Simulus is currently undertaking the first stage of the flowsheet upscaling test work, including a programme of small scale optimisation followed by a bulk leach of approximately 600Kg of sample from the Yanneri Ridge orebody. The work will provide detail on small scale variability within the deposit as well as taking the process through to the production of both manganese sulphate and EMM product samples.

As the independent consulting business line of the WorleyParsons Group, Advisian provides a true end-to-end offering for clients. With approximately 2,800 consultants across 19 countries, Advisian integrates strategy, management and technical consulting expertise, backed by real-world experience.

### Energy

Advisian, the global consulting firm of Worley Parsons has been engaged by E25 to provide consulting support in relation to the project. E25 is aiming to implement a lower cost, low emissions solution as this will improve the project economics and potentially allow E25 to produce a product which has a lower carbon footprint than conventionally produced EMM. Producing battery grade high purity manganese sulphate using Element 25's process is exothermic and thereby energy neutral, however producing EMM requires large amounts of electrical energy and therefore the work on the power solution is important to that part of the project. E25 believes that being able to provide a low cost, low emission product may provide a marketing advantage in the future, as potential E25 customers (steel and battery manufacturers) seek to decarbonise their respective supply chains.

### Environmental



MBS Environmental has a skilled in-house team of environmental scientists, geochemists, environmental engineers and geoscientists which have provided environmental and management services to the mining sector for a wide range of exploration, mining and onshore gas projects for over 30 years. MBS have been engaged to plan and manage the various tasks required to take the Butcherbird Project through the environmental permitting process.

### Geotechnical



In addition to these key appointments, a geotechnical and “diggability” assessment of drill core has been completed by independent specialist consultants 4DG. No issues were identified and whilst the work has not been completed, the preliminary assessment concluded that the majority of the deposit will likely not require drill and blast. Localised ripping may be required in parts of the lateritic cap.

### Project Finance

As part of the funding solution for the Butcherbird Project, the Company is in discussions with a number of independent advisory groups to provide early stage project financing services including initial engagement with potential funders, and advice on the available funding structures and strategies in relation to the project.

Drilling programmes for infill drilling of the resource to measured status as well as groundwater exploration work have been planned and POW’s are lodged and approved respectively. These programmes are expected to commence when a suitable drilling rig becomes available.

### Native Title

Engagement has commenced with the representatives of the Traditional Owners of the Nyiaparli Native Title Claim area to negotiate a native title agreement to allow the granting of the mining lease application at Butcherbird to progress.

### Flowsheet Development

Discussions with CSIRO in relation to agreeing on a structure to collaboratively develop and commercialise the process technology that has been developed for the Butcherbird project are progressing and the Company looks forward to announcing the details in due course.

As a result of commencement of these programmes, all key work streams relating to the Pre-Feasibility are now active. The Company looks forward to providing further updates to the market as key milestones are met in relation to the development of this world class resource using landmark new technology which has the potential to materially impact the sustainability of the high purity manganese industry and generate shareholder value.

Justin Brown

**Executive Director**



### Disclaimer

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

### Competent Persons Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr David O'Neill who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results and Exploration Targets were compiled, Mr O'Neill was an employee of Element 25 Limited. Mr O'Neill is a geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Neill consents to the inclusion of this information in the form and context in which it appears in this report.

The information in this report that relates to the mining, corporate and site administration, logistics, Scoping Study development, financial model and future production targets is based on information compiled by Mr Ian Huitson who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Huitson is a consultant to Element 25 Limited. Mr Huitson is a Mining Engineer and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Huitson consents to the inclusion of this information in the form and context in which it appears in this report.