



ASX/Media Announcement

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PILBARA COMMENCES INITIAL WORK ON 5Mtpa EXPANSION AT PILGANGOORA AS PROJECT CONSTRUCTION ACCELERATES

Award of further contracts, extensive site works and key personnel appointments ensure Pilbara remains on track for first ore on ship in Q2 2018; initial work also underway on Stage 2 expansion

HIGHLIGHTS:

- **7-year site power contract awarded to Contract Power Group, with provision for dual fuel and solar-hybrid applications.**
- **Former senior FMG executive Dale Henderson appointed as Project Director as part of the Pilbara executive team, charged with delivery of the balance of the Pilgangoora Project construction, operational readiness and responsibility for ongoing operations.**
- **Jason Cross, Manager – Projects, appointed to the 5Mtpa Pilgangoora expansion project with metallurgical testwork already underway in support of the project expansion given the robust outlook for the lithium market.**
- **Extensive site works underway at Pilgangoora as the Company works towards the commencement of mining in early November and concentrate production in the second quarter of 2018.**

Australian lithium developer Pilbara Minerals Limited (ASX: PLS) (“**Pilbara**” or “**the Company**”) is pleased to announce the award of further key contracts, senior personnel appointments and other key developments at its flagship 100%-owned **Pilgangoora Lithium-Tantalum Project** in WA, where project construction activities are accelerating on several fronts.

In line with its expedited construction schedule, Pilbara is targeting commencement of shipments of spodumene concentrate in the second quarter of 2018 as its Stage 1, 2Mtpa project advances rapidly towards first production. Initial work has also already commenced on the previously foreshadowed Stage 2 expansion to 5Mtpa, given the exceptionally robust outlook for the lithium market.

A final contract award has now been issued to Australian-owned Contract Power Group for the site power station construction and ongoing operations. Importantly, the build own operate power contract provides flexibility for the application of dual fuel (gas or diesel) within the first 2 years of the contract and for future solar-hybrid applications. This is consistent with Pilbara’s commitment to apply the latest and lowest cost technology for the site’s future power supply.

In consideration of the near-term transition to ongoing operations, Pilbara has secured the appointment of highly experienced mining executive Dale Henderson in the role of Project Director to deliver the balance of the Stage 1 construction, establish Pilbara’s operational readiness, and then take responsibility for the ongoing operations.

Mr Henderson’s commencement with the Company on 4 September facilitates Jason Cross’s (Manager – Projects) move to take responsibility for delivery of the Stage 2, 5Mtpa expansion project. Metallurgical testwork and engineering are now underway in support of the expansion project and the Company’s objective is to refresh the previously published 4Mtpa Pre-Feasibility Study to reflect the expanded 5Mtpa production objective.

Site works at Pilgangoora are now well advanced with the first 60 rooms at the camp commissioned and a further 240 rooms expected to be completed by early to mid-October. NRW Pty Ltd (**NRW**) is well advanced with the site bulk civil earthworks package, with all of the plant pads (with the exception of the crusher pad) now ready for handover to RCR. Tailings dam pad preparation is also well advanced with site access road upgrades underway.

Pilbara Minerals’ Managing Director, Ken Brinsden, said the Company’s development team was working with its contractors to deliver on the aggressive development schedule for the Pilgangoora Project, ensuring that the

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Company remains on track to become a significant new, low-cost lithium producer by early next year – ideally positioned to take advantage of robust, and strengthening, market conditions.

“Our entire team is focused on ensuring delivery of the Stage 1 Pilgangoora Project, with site works now well advanced. As activities ramp-up, we are delighted to have secured an executive of Dale Henderson’s calibre and project development and operations experience, which will be invaluable in the delivery and operations at Pilgangoora.

“Importantly, his commencement also allows us to allocate additional resources to the 5Mtpa expansion program, which would see mine production capacity grow to approximately 100,000tpa of lithium carbonate equivalent (LCE),” Mr Brinsden said.

“Investors should not lose sight of the incredible scale we can achieve at Pilgangoora and, in light of the current and projected demand for lithium, Pilgangoora is ideally placed to meet this near-term and future demand for raw materials for the burgeoning lithium-ion global supply chain.”

With the bulk of goods and services for the Stage 1, 2Mtpa development already procured, Pilbara will now look to secure its final major works packages in respect of the borefield network, Great Northern Highway intersection upgrade works, and mining operations centre buildings and infrastructure.

Key Personnel Appointments and 5Mtpa Processing Expansion Studies

Experienced Project Director – Dale Henderson, has joined the Company (4 September) to assist in the final construction at Pilgangoora, to manage the transition to operations and ultimately to oversee steady-state operations. Mr Henderson is a Civil Engineer who has led significant development projects (including FMG’s Northstar mine and processing development, just 15km from the Pilgangoora site) and has had extensive operational management experience that will contribute significantly to the continued growth of the Company.

His appointment facilitates the transition of Jason Cross (Manager – Projects) to oversee the 5Mtpa expansion project. Metallurgical testwork and engineering are now underway in support of the Stage 2 Project, with the Company aiming to refresh the previously published 4Mtpa Pre-Feasibility Study for a 5Mtpa process flow sheet.

Pilbara is now aiming to complete a Definitive Feasibility Study on the 5Mtpa expansion project by mid-2018.

The significant scale of the Pilgangoora Resource and Ore Reserve presents an opportunity to match the substantial demand which the Company sees in the global market for lithium raw materials, to expanded mine capacity. 5Mtpa processing capacity at Pilgangoora would increase spodumene concentrate production (SC6.0 equivalent) to over 800,000 tonnes per annum, or approximately 100,000 tonnes of Lithium Carbonate Equivalent (LCE) capacity. At this scale, Pilgangoora would be one of the world’s largest lithium mines, if not the largest, depending on the timing of expansion at the existing Greenbushes mine.

Future expansion at Pilgangoora will be subject to further engineering studies and an assessment of the demand conditions for spodumene in the future.

Site Works

The bulk civil earthworks are underway via NRW, with pad clearing and construction now largely complete for the processing plant site and the initial cell 1 of the tailings dam facility.



Figure 1 – Pilgangoora Process Plant Site and Tailings Dam Overview



Figure 2 – Pilgangoora Process Plant Site Detail



Figure 3 – Pilgangoora Tailings Dam Detail (Clearing and Cell1 Wall Key Trench)



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The site communications infrastructure is now largely in place and, following the installation of the microwave link from the site through to the existing Wodgina mining operation, is expected to be commissioned towards the end of September.



Figure 4 – Site Communications Infrastructure during construction and completed

ADDITIONAL INFORMATION

ABOUT PILBARA MINERALS

Pilbara Minerals (“Pilbara” – ASX: PLS) is a mining and exploration company listed on the ASX, specialising in the exploration and development of the specialty metals Lithium and Tantalum. Pilbara owns 100% of the world class Pilgangoora Lithium-Tantalum project which is among the largest Spodumene (Lithium Aluminium Silicate) projects in the world. Pilgangoora is also one of the largest pegmatite hosted Tantalite resources in the world and Pilbara proposes to produce Tantalite as a by-product of its Spodumene production.

ABOUT LITHIUM

Lithium is a soft silvery white metal which is highly reactive and does not occur in nature in its elemental form. It has the highest electrochemical potential of all metals, a key property in its role in Lithium-ion batteries. In nature, it occurs as compounds within hard rock deposits and salt brines. Lithium and its chemical compounds have a wide range of industrial applications resulting in numerous chemical and technical uses. A key growth area is its use in lithium batteries as a power source for a wide range of applications including consumer electronics, power station-domestic-industrial storage, electric vehicles, power tools and almost every application where electricity is currently supplied by fossil fuels.

ABOUT TANTALUM

The Tantalum market is boutique in size with around 1,300 tonnes required each year. Its primary use is in capacitors for consumer electronics, particularly where long battery life and high performance is required such as smart phones, tablets and laptops.

FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They are indicative and may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this announcement are to Australian currency, unless otherwise stated.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

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