



22 October 2019

SEPTEMBER 2019 QUARTERLY REPORT

Hastings Technology Metals Limited

ABN 43 122 911 399

ASX Code: Shares - HAS

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Board

Charles Lew (Executive Chairman)

Guy Robertson (Finance Director)

Jean Claude Steinmetz (Non-Exec Director)

Neil Hackett (Non-Exec Director and Company Secretary)

Mal Randall (Non-Exec Director)

www.hastingstechmetals.com

- **DRA Pacific Pty Ltd awarded the Engineering, Procurement and Contract Management (EPCM) Contract for the Yangibana Rare Earths Processing Plant.**
 - **The scope of works under the DRA Pacific Pty Ltd EPCM agreement has an estimated capital value of circa A\$350m**
 - **WA Minister for Environment has granted the environmental permit for the Yangibana Rare Earths Project.**
 - **Environmental approval milestone clears the path for remaining permits to be considered leading to construction and development work commencing**
 - **5c Water Entitlement License Received with an annual capacity of 1.84GL**
 - **Pace of design work continues readying for construction**
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Yangibana Project – Development Progress

Health and Safety

The site continued to remain Lost Time Injury (LTI) free. There were no reported incidents on site during the September quarter and is currently 452 days LTI free as of September 30, with the Lost Time Injury Free Frequency Rate (LTIFR) at 0 and the Total Recordable Injury Free Rate (TRIFR) at 11.60.

Hastings continues to develop its health and safety management procedures. The risk register and risk treatment plans are being finalised, and progress provided by the all the risk owners has been solicited.

Ongoing radiation monitoring has been taking place during the quarter and passive radiation monitors placed around the site have been changed over, for the next monitoring period. Positional Radon monitoring was completed on the village pad area to provide base level Radon exposure results to the Department of Mines, Industry Regulation and Safety.

Environment

The formal environmental impact assessment was completed under Part IV of the Environmental Protection Act 1986 (WA). The EPA released its assessment report, no appeals were received. On the EPA's recommendation and following consultation with other Ministers, the Hon. Stephen Dawson (Minister for Environment, Western Australian government) granted the environmental permit for the Yangibana Rare Earths Project (Yangibana Project). This permit means the Company has now received the key environmental permit required to move forward on its Yangibana Project to produce a mixed rare earth carbonate on site. The permit is subject to conditions listed in Ministerial Statement No. 1110, which is published on the EPA website. The conditions require on going compliance with additional flora and vegetation surveys and monitoring, groundwater abstraction monitoring and water level monitoring of the nearby stygofauna habitat.

During the quarter Hastings also received notice that it was granted approval by the Department of Water and Environmental Regulation (DWER) under section 5C of the Rights in Water and Irrigation Act 1914, for the abstraction of 1.84 GL per annum of water from the palaeochannel aquifer and 0.82 GL per annum from fractured rock aquifers but not to exceed 2.5 GL per annum in total from the combined water sources. The annual water entitlement is sufficient to cover the site-wide water requirements for the project.

The formal environmental impact assessment under the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth) is in the final stage of assessment. There is ongoing dialogue with the Commonwealth Department of the Environment and Energy (DoEE) regarding the suitability of the water source and vegetation season suitability. Additional water modelling, a detailed water balance and a targeted vegetation survey were undertaken during the quarter to address the DoEE's request for additional information.

The site-wide Works Approval application required under Part V of the Environmental Protection Act 1986 (WA), submitted in December 2018, was resubmitted in June following the completion of revised Tailings Storage Facility designs. During this quarter, the Works Approval application was advertised to the public and Hastings has been fulfilling a request for additional air quality modelling based on new DWER draft air quality guidelines (yet to be released to the public).

Project Development Update

The pace of development work continued unabated on multiple fronts during the quarter. Advancement in negotiations of the scope of works, scope of services, terms and conditions and schedules with a preferred Engineering Services Supplier led to the award of the Engineering, Procurement Contracts Management (EPCM) Contract with DRA Pacific Pty Ltd ("DRA Pacific").

The EPCM contract is the single largest dollar value contract associated with the Yangibana Project. Works directed under the EPCM Contract have an estimated value of approximately A\$350M.

The key component of the contract terms is the comprehensive performance guarantee linked to ore throughput for the entire process flow sheet.

The appointment of DRA Pacific as the EPCM contractor for Hastings represents another critical milestone for the Project, reinforcing that Yangibana is execution ready.

An independent review of the Mineral Resources was instigated as an audit check on the existing publicly announced Mineral Resources (ASX announcement “Increased in Measured and Indicated Resources Yangibana” dated 28 November 2018.) A geological re-interpretation and re-wireframing exercise of the five (5) currently economic deposits, Bald Hill, Frasers, Auer, Yangibana and Yangibana North was completed based on the same set of data as used in the previously announced Mineral Resources (ASX announcement “Increased in Measured and Indicated Resources Yangibana” dated 28 November 2018). The deposits form the basis of the Measured and Indicated Mineral Resources for the Definitive Feasibility Study released in November 2017.

The next steps will involve the re-estimation of the five deposits using a Multiple Indicator-Kriging technique. Once the Mineral Resource re-estimation is completed it is envisaged that new mining Ore Reserves will be generated in order to capitalise on the opportunities of the Northern Australia Infrastructure Funding (NAIF) funding and other operational cost improvements defined over the last several months.

Numerous other work packages were progressed with a focus on progressing the processing plant and infrastructure packages design, namely:

- Gas pipeline - consultant was appointed to be engaged to assist in the planning and development;
- Power Station – tender documentation being prepared;
- SAG mill - vendor documentation around design was received;
- Kiln package – continued design expansion with FLSmidth with a Hazard Operational Review completed in July around the burner management system;
- Gas Scrubber – the detailed design portion of the package with TAPC continued;
- Thickeners – vendor interaction commenced;
- REE Dryer – first round of vendor designs drawings received; and
- Pug Mixer – pilot test work was successfully completed.

The new combined (Tailings Storage Facility) TSF design preliminary report was received and is now under assessment. The geophysics investigation previously completed is awaiting a final report.

Exploration Update

No exploration activities were completed during the period. A bulk 2 tonne sample was sourced from site in order to progress the next stage of ore sorting test work. The sample has been crushed and assayed and was despatched for analysis.

Project Finance

Since obtaining in principle eligibility in April this year for the German government sponsored untied loan guarantee scheme (“UFK”) for up to US\$140m (~A\$200m) from Euler Hermes, progress on due diligence on the technical, economic, environmental, legal and social aspects of the Yangibana Project has continued apace. A cursoric review was also completed in July with a favourable response from Euler Hermes leading to the final stages of due diligence, inter alia, including term sheet negotiations

(for the project loan). A parallel process was initiated with NAIF since April this year and discussions are at an advanced stage for NAIF to fund the infrastructure component of the Yangibana project. This is estimated to be up to A\$195m.

Project Capital Cost

An integral part of the Project's development includes the provision of power to the mine site and upgrade of public road access infrastructure which will significantly enhance business and economic activity in the Upper Gascoyne region.

In the revised capital expenditure ("Capex") announcement dated 13 March 2019, the Capex estimate does not include the construction of a gas pipeline or onsite power plant ("GPPP") which was originally contemplated under a third-party build, own and operate structure.

During financing discussions with Northern Australian Infrastructure Facility ("NAIF") for the overall infrastructure needs of the Yangibana project, an opportunity has been identified to seek NAIF funding for the GPPP as it has clear public benefits that would contribute positively to the local communities and future developments in the area through 3rd party access where the pipeline will be built.

The proposed 115km pipeline to the mine site will originate from the Dampier-Bunbury Natural Gas Pipeline which is an important provider of West Australia's energy needs and has been in operation since 1984. A cost benefit analysis has now determined that there are significant operating costs advantages to own and operate the GPPP although this will increase capex from \$427 million as announced in March this year, to \$512 million (excluding contingencies). Hastings is in negotiations with NAIF for this additional funding for the mine infrastructure.

In addition to the GPPP, Hastings is also seeking NAIF funding for roads improvements and Information, Communications and Technology (ICT) infrastructure expansion. Hastings is proposing infrastructure expansion which involves the installation of a wireless radio link data connection to site and beyond, capable of supplying all the high-speed internet data requirements for the project and for distribution to both remote pastoral stations and surrounding aboriginal communities.

As part of a NAIF proposal Hastings is investigating the opportunity to upgrade portions of the Shire and Pastoral road access to site. Local roads are predominately gravel and can be fragile with limited water available for stabilisation. Upgrading of road sections to a bitumen standard would create a safer and faster access to site whilst also benefiting and servicing the major tourist attractions of the Kennedy Ranges and Mount Augustus.

Commercial

In the last quarter, there has been numerous media reports on the significance of rare earth as a critical mineral resource for advanced technologies, primarily the need for neodymium and praseodymium used in making permanent magnets for electrical motors. These reports represent an encouraging future for the demand of rare earth and the prominent role Australia will play as a non China source of supply.

Ongoing negotiations for the offtake contracts with Schaeffler and Thyssenkrupp continue as it forms the basis of the project finance loan for the UFK scheme, the KFW commercial facilities and the NAIF

infrastructure loan. These German offtake contracts are intricate in nature as it spans a 10 year period and the carbonate that we produce will have to be further separated into rare earth oxides prior to conversion into metals for alloying and finally permanent magnets.

Appointment of Finance Director

During the quarter the Company re-appointed Mr Guy Robertson as Finance Director of the Company. Mr Robertson has been associated with the Company since October 2011 until November 2018 when he resigned due to personal circumstances, now resolved. Mr Robertson (B.Com Hons CA) has significant experience as a Director and Company Secretary of ASX listed and private companies in both Australia and Hong Kong and previously held senior roles in the Jardine Matheson group of companies over a period of sixteen years.

Placement of Rights Issue Shortfall

In August, the Company placed a further 20,700,000 shares (and 10,350,000 attaching options) of the rights issue shortfall raising a further \$3,519,000.

Brockman Project

The Company continues the process of preparing documentation to support the application of a Mining Lease on the Brockman Project.

Competent Person Statements

The information in this announcement that relates to Resources is based on information compiled by David Princep. Mr Princep is a consultant to the Company and a member of the Australasian Institute of Mining and Metallurgy. Consent to include statements in this announcement are provided below. David has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this announcement and to the activity which they are 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' ("JORC Code").

About Hastings Technology Metals Limited

Yangibana Project

Hastings Technology Metals Limited (ASX:HAS, Hastings or the Company) is advancing its Yangibana Rare Earths Project in the Upper Gascoyne Region of Western Australia towards production. The proposed beneficiation and hydro metallurgy processing plant will treat rare earths deposits, predominantly monazite, hosting high neodymium and praseodymium contents to produce a mixed rare earths carbonate that will be further refined into individual rare earth oxides at processing plants overseas.

Neodymium and praseodymium are vital components in the manufacture of permanent magnets which is used in a wide and expanding range of advanced and high-tech products including electric vehicles, wind turbines, robotics, medical applications and others. Hastings aims to become the next significant producer of neodymium and praseodymium outside of China.

Hastings holds 100% interest in the most significant deposits within the overall project, and 70% interest in additional deposits that will be developed at a later date, all held under Mining Leases. Numerous prospects have been identified warranting detailed exploration to further extend the life of the project.

Brockman Project

The Brockman deposit, near Halls Creek in Western Australia, contains JORC Indicated and Inferred Mineral Resources, estimated using the guidelines of JORC Code (2012 Edition).

The Company is also progressing a Mining Lease application over the Brockman Rare Earths and Rare Metals Project.

Hastings aims to capitalise on the strong demand for critical rare earths created by the expanding demand for new technology products.

For further information on the Company and its projects visit www.hastingstechmetals.com

For further information please contact:

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TENEMENT SCHEDULE

as at 30 September 2019 (All tenements are in Western Australia)

YANGIBANA PROJECT

Gascoyne Metals Pty Limited (100% subsidiary)

Es09/1989, 2007, 2084, 2086, 2095, 2129, 2137, - 100%

Es09/1703, 1704, 1705, 1706, 2296, 2298, 2333 (application) - 70%

E09/2333 – 70% (application)

Es09/2334, 2364 – 100% (application)

Ms09/157, 160, 164, 165 - 100%

Ms09/159, 161, 163 - 70%

Ps09/482, 489 - 100%

G09/10, 14 - 100%

G09/11, 13 - 70%

L09/66-72, 74, 75, 80-83, 85, 86-87, 89 - 100%

L09/91 – 100% (application)

Yangibana Pty Limited (100% subsidiary)

Es09/1700, 1943, 1944, 2018, 2334 (application) - 100%

Ms09/158, 162 -100%

Gs09/17-18, 20 – 100%

BROCKMAN PROJECT

Brockman Project Holdings Pty Limited (100% subsidiary)

M80/636 (application)

E80/5248 (application)

P80/1626 to 1635 - 100%