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DECEMBER 2018 QUARTERLY ACTIVITIES REPORT

Q4 Highlights

Terramin Base Metals

Tala Hamza Zinc Project

- Tala Hamza Optimisation Study results released to market highlighting the **potential to treat an** additional 8Mt mid-grade ore. The results confirmed the rationale for a multi-scenario multi-criteria review of the base case Definitive Feasibility Study (DFS)
- Negotiations with Algerian authorities in Algiers in December confirmed technical matters had been addressed and the emphasis moved towards financing discussions
- Formal approval and Mining Licence (ML) issuance is not expected on the current timing before the end of Q2 2019.

Terramin South Australia Gold

Bird-in-Hand Gold Project and Regional Gold Exploration

- Terramin continued to pursue its South Australian gold strategy, announcing acquisition of the historic Kitticoola Mine. Production at Kitticoola could supplement gold production from Bird-in-Hand and utilise spare capacity at the Angas processing hub at Strathalbyn
- Bird-in-Hand Scoping Study released with Post-Tax Nominal NPV₈ A\$101m and IRR 96%
- Expenditure on Managed Aquifer Recharge (MAR) trial largely complete at the end of December with the final re-injection test pending government EPEPR approval
- Community consultation continued through the Strathalbyn Community Consultation Committee and the Woodside Community Consultative Committee
- Positive local media reports on Terramin's plans to return at least 40 jobs to the Strathalbyn area

Exploration

- Deed of Access signed with the Commonwealth Government to the Murray Bridge Training Area which hosts the Wild Horse potential copper-gold porphyry target
- Landowner negotiations continued on a number of promising gold targets outside of the Woodside area

Corporate and Environmental Performance

- Increasing interest in Terramin's South Australian gold assets from a number of parties. Refinancing and extension of Terramin's finance facilities with Asipac
- Corporate presentations at IMARC in Melbourne and various capital cities
- Zero harm at all sites and no environmental exceedances against lease conditions recorded

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TERRAMIN BASE METALS

TALA HAMZA ZINC PROJECT

100% owned by Western Mediterranean Zinc Spa (WMZ)

Terramin holds a 65% shareholding in WMZ. The remaining 35% is held by two Algerian government-owned companies: Enterprise Nationale des Produits Miniers Non-Ferreux et des Substances Utiles Spa (ENOF) (32.5%) and Office National de Recherche Géologique et Minière (ORGM) (2.5%).

Update

During the quarter, the Optimisation Study was released to the ASX. The WMZ joint venture partners have continued to provide all the required information to the Algerian regulator in the format that the regulator requires for the mining lease approval. Terramin is awaiting a formal approval from its partners for the lodgment of the mining lease. Discussions have moved on from technical matters, particularly the mining method, to project financing. Terramin expects to be in a position to update the market on the outcome in Q2 2019.

The revised DFS envisages a long life (21 year) project at lower processing rates and higher grades than the original DFS in 2010. Importantly, the DFS 2018 moves away from the larger scale, higher capex block cave mining method and utilises a selective mining method, Underhand Drift and Fill (UDF) that removes the surface expression of the mine and allows for underground placement of the majority of the tailings generated by the project. The change in mining method will remove the need for a tailings dam and significantly reduce the preproduction capital expenditure envisaged in the DFS 2010.

Dialogue with Algerian authorities focussed on validation of key DFS 2018 assumptions and on performance at comparable sites in China, namely Jinchuan's flagship large (10Mtpa) nickel project in Guangsu Province which exhibits similar geotechnical characteristics to Tala Hamza. A site visit to similar mining projects in China with WMZ Joint Venture partners was held in December 2018.

Expenditure on the Tala Hamza project during the quarter was \$0.3 million.



TERRAMIN SOUTH AUSTRALIA GOLD

BIRD-IN-HAND GOLD PROJECT & ANGAS PROCESSING PLANT

100% owned by Terramin and its subsidiary Terramin Exploration Pty Ltd

The Bird-in-Hand Gold Project is located approximately 30km north of Terramin's existing mining and processing facilities at the Angas Zinc Mine (Angas or AZM) which was operational until 2013. The project has a high grade Resource of 650,000 tonnes at 12.6g/t for 265,000 ounces of gold. It is anticipated that, subject to required regulatory approvals, the Bird-in-Hand ore will be processed utilising the facilities at Angas which can be modified to process gold-bearing material. The existing tailings dam at Angas has the capacity to hold Bird-in-Hand tailings.

Update

The Bird-in-Hand Scoping Study was released during the quarter, including results of Nominal NPV $_8$ \$A101 and IRR 96%. The main focus is to develop the Angas processing facility as a central processing plant for feed from Bird-in-Hand and utilise spare capacity to treat ore from Kitticoola and other potential targets, either currently held by the Company or available for acquisition.

The Company's Managed Aquifer Recharge (MAR) trial neared completion with most expenditure completed by the end of December. The final re-injection test was expected to be undertaken in January, pending receipt of Exploration Program for Environment Protection and Rehabilitation (EPEPR) approvals from the government. This program allows the Company to ascertain the suitability, via calibrated numerical modelling, of the aquifer for a MAR scheme. MAR schemes are a proven and effective water management and preservation technique used in many industries, including mining to return water that is pumped from the mine workings back into the aquifer.

In addition to consultation with government bodies, the Company has also continued its ongoing community consultation in line with the Company's Community Engagement Plan. This included personal interactions with landholders and meetings of the community consultative committee for the project (the Woodside Community Consultative Committee or WCCC). The WCCC met four times during the quarter to discuss and provide input regarding various aspects of the project. The WCCC has been useful in providing key information to both design and refine the outcomes that will be used to develop the detailed regulatory triggers for every environmental aspect of the project, as well as ongoing consultation regarding the construction, operation and rehabilitation of the area after mine closure.

The AZM site continued to be maintained in accordance with the DEM approved Mine Care and Maintenance Plan and is operating in compliance with its lease conditions. The Strathalbyn Community Consultation Committee and the Company met during the quarter, with the Company providing updates on the plan to use the Angas facility for the processing of Bird-in-Hand gold ore and also engagement with Canadian company Hydrostor regarding the Advanced Compressed Air Energy Storage (ACAES) project.

Expenditure on the Bird-in-Hand project and Angas Zinc Mine site was \$0.7 million.

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EXPLORATION

EXPLORATION PROJECTS

100% owned by Terramin and Terramin subsidiaries Terramin Exploration Pty Ltd or Menninnie Metals Pty Ltd unless otherwise disclosed as part of a joint venture arrangement

The Adelaide Hills Project consists of twelve contiguous exploration tenements that cover 3,482 km² and stretch from Lake Alexandrina to Kapunda. This project area is considered highly prospective for gold, copper, lead, zinc and rare earth elements. Terramin's South Gawler Project is located along the southern margin of the Gawler Ranges, northern Eyre Peninsula, South Australia. The Project comprises a group of seventeen Exploration Licenses totaling 8,321km².

Update

The Adelaide Hills has a long history of mining and was the site of Australia's first base metals mine (Glen Osmond, 1841) and first gold mine (Victoria Mine, 1846). From 1841 to 1851 virtually all of Australia's metalliferous mines were located in South Australia. Over 250 historic gold and copper mines and prospects are located on Terramin's Adelaide Hills tenements.

Terramin's Kapunda Project partner and in-situ recovery (ISR) specialist, ECR, received \$2.9m in Federal Government funding in the September 2018 quarter to develop the in situ technology further. The parties are investigating the potential to extract copper through ISR from the shallow mineralised halo around the historic Kapunda Mine workings. During the current quarter, a proof of concept has been established for Insitu-Recovery of copper with the following highlights to date:

- Positive initial hydrogeological assessment and water sampling completed;
- Construction of the necessary technical models of geology, ore grade, copper species distribution, and fracture density;
- Initial hydrogeological computer modelling which suggests that flow through the ore body is possible and the geology is amenable for ISR;
- Successful completion of preliminary laboratory work, and determined that the copper species present are recoverable; and
- Initial implementation of a community education program for community on benefits of ISR.

Expenditure on the Adelaide Hills and Gawler Ranges tenements was \$0.1 million.



CORPORATE AND ENVIRONMENTAL PERFORMANCE

Terramin management continued to work towards the recapitalisation of the business and undertook a number of discussions with shareholders and investors throughout the period. The company continued to be supported by Asipac and discussions on refinancing of loans continued over the period.

Terramin continued to pursue its safety and environmental goals during the quarter. There were no recorded safety incidents and no instances of non-compliance with relevant safety or environmental regulation or lease conditions.

Terramin continued to work closely with Canadian renewable energy company, Hydrostor, which plans to develop and convert the underground workings at Angas into a compressed air storage facility that can produce in the order of 10MW of power at peak times to ensure grid stability and power availability.

During the quarter 1,750,000 unlisted options excisable at 13.5 cents expired.

As at 31 December 2018, the Company's cash balance was \$0.2 million.

For further information, please contact:

Investor Relations

Richard Taylor Chief Executive Officer Terramin Australia Limited +61 8 8213 1415 info@terramin.com.au

Financial Advisers

Michel Mamet
Managing Director
Flagstaff Partners
+61 457 771 733

Media Enquiries

Mike O'Reilly Media and Government Consulting O'Reilly Consulting +61 414 882 505

CORPORATE INFORMATION

Terramin Australia Limited (ABN 67 062 576 238)

Unit 7, 202-208 Glen Osmond Road Fullarton, South Australia 5063

T+61 8 8213 1415 E info@terramin.com.au F+61 8 8213 1416

W www.terramin.com.au

DIRECTORS AND MANAGEMENT

Feng (Bruce) Sheng Michael H Kennedy **Kevin McGuinness Angelo Siciliano**

Wang Xinyu **Richard Taylor** Simon lacopetta

Executive Chairman

Non-Executive Deputy Chairman

Non-Executive Director Non-Executive Director **Executive Director** Chief Executive Officer

Chief Financial Officer and Company Secretary

CAPITAL STRUCTURE - 30 DECEMBER 2018

Shares on issue 1,869,601,371 **Unlisted options** 10,000,000



Forward Looking Statements

This announcement includes certain 'forward looking statements'. All statements, other than statements of historical fact, are forward looking statements that involve various risks and uncertainties. There can be no assurances that such statements will prove accurate, and actual results and future events could differ materially from those anticipated in such statements. Such information contained herein represents management's best judgement as of the date hereof based on information currently available. Except for statutory liability which cannot be excluded, each of Terramin, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this document and exclude all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. The Company does not assume any obligation to update any forward-looking statement. Accordingly no person or entity should place undue reliance on any forward looking statement.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Eric Whittaker (Tala Hamza and Exploration) and Mr Dan Brost (Bird-in-Hand), both being Competent Persons who are Member(s) of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whittaker is employed as the Principal Resource Geologist of Terramin Australia Limited and Mr Brost is a geologist consulting to Terramin. Mr Whittaker and Mr Brost have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person(s) as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Whittaker and Mr Brost consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr Luke Neesham, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Neesham is Principal Mining Engineer for GO Mining Pty Ltd a consulting firm engaged by Terramin Australia Limited to prepare mining designs and schedules for the Tala Hamza Feasibility Study. Mr Neesham has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Neesham consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.