

HEADS OF AGREEMENT TO ACQUIRE BCAL DIAGNOSTICS

Spectrum Rare Earths Limited (“SPX” or the “Company”) is pleased to announce that it has entered into a binding Heads of Agreement (“HOA”) with BCAL Diagnostics Pty Limited (“BCAL Dx”) to acquire all of the issued capital in BCAL Dx.

About BCAL Diagnostics Pty Ltd (BCAL Dx)

BCAL Dx is a Sydney-based company that is developing a blood-based test for the presence of breast cancer. BCAL Dx believes, based on current data, that a test based on the technology (the BCAL test) has the potential to revolutionise breast cancer screening, diagnosis and monitoring on a global basis.

The current breast cancer screening market is dominated by imaging technologies such as mammography and ultrasound and there is currently no effective blood-based screening or diagnostic test for breast cancer on the market worldwide.

The BCAL (Breast Cancer Associated Lipids) technology is a blood based biomarker test based on detection and analysis of breast cancer-specific phospholipids. The core BCAL technology has evolved from extensive research and significant investment in the USA and Australia over the past ten years. A patent application lodged by the University of Louisville, USA, in 2012 demonstrated the ability to use blood based cancer derived lipids to discriminate breast cancer patients from healthy volunteers. The patent also demonstrates the ability to specifically discriminate lung cancer patients. BCAL Dx has secured the exclusive global licence to the patent from the University of Louisville Research Foundation.

BCAL Dx is working with the Kentucky, USA, based research team to develop the technology as a breast cancer screening test. A pilot clinical study has confirmed the BCAL technology can accurately discriminate between breast cancer positive and healthy controls and confirms its potential as an effective breast cancer screening tool. BCAL Dx is now moving from proof of concept to a larger clinical study to validate the accuracy and improve the scalability of the test. The funds raised will be used to complete this process. The aim is to develop a test that has the following features:

- A blood based test that can be processed in a centralised pathology laboratory.
- A safe screening test that can be used for screening, diagnosing and monitoring of breast cancer throughout the breast cancer disease management continuum.
- Available to women of all ages, allowing high risk younger groups to be screened through all stages of their life.
- An accurate (sensitivity and specificity) and cost effective test when compared with current technologies in the market

The BCAL Dx business model is currently built around creating revenue streams through the licensing of the BCAL process to pathology companies.

Registered Office

15 Lovegrove Close
Mount Claremont WA 6010
Tel: 08 9384 3284 | Fax: 08 9284 3801
Email: info@spectrumrareearths.com.au
Website: www.spectrumrareearths.com.au
ABN: 94 115 770 226

Company Management

Anthony Barton: Chairman
Alexander Moyle: Director
Leon Charuckyj: Director
Graeme Boden: Company Secretary

Further details of the BCAL Dx business and market opportunities will be outlined in the notice of meeting to SPX shareholders seeking their approval of the BCAL Dx transaction and in the prospectus to raise funds and comply with the Listing Rules for the BCAL Dx transaction.

Heads of Agreement

SPX has entered into a binding Heads of Agreement with BCAL Dx by which SPX will acquire 100% of the issued capital of BCAL Dx. In consideration SPX will issue to BCAL shareholders the number of fully paid ordinary shares that will equal 65% of the fully diluted issued capital of SPX at the time of completion of the transaction (including after the prospectus capital raising).

Completion of the Heads of Agreement is subject to a number of conditions precedent, including:

- (a) SPX and BCAL Dx being satisfied in their absolute discretion with the results of their due diligence by 30 June 2016;
- (b) execution of a full-form share sale agreement by SPX, BCAL Dx and the shareholders of BCAL Dx and any other necessary formal documents by 30 June 2016;
- (c) SPX and BCAL Dx obtaining all necessary shareholder approvals to give effect to the transaction, including approval of the change in nature and scale of SPX's activities and the consolidation of its shares;
- (d) the parties obtaining all necessary third party consents or waivers (if any) to give effect to the transaction;
- (e) SPX lodging a prospectus with ASIC and ASX Appendix 1A (ASX listing application) with ASX by no later than 31 August 2016; and
- (f) SPX successfully raising not less than \$3.5 million under the prospectus, or such higher amount as is agreed between the parties so as to comply with the relevant ASX admission requirements.

The timing and completion of the BCAL Dx acquisition will depend on the satisfaction of the conditions precedent, which in some cases are not within the control of the Company or BCAL. If the conditions precedent are not satisfied or waived by the relevant agreed date (with ultimately the end date being 20 November 2016), either party may elect to terminate the BCAL Dx acquisition.

Further details of the BCAL Dx acquisition will be outlined in the notice of meeting which will be sent to shareholders to consider and approve, including among other things, the transaction.

Name Change

The Company will seek shareholder approval to change its name to BCAL Diagnostics Limited to reflect its new activities.

Board of Company

Upon completion of the BCAL Dx acquisition, the executive team of SPX will include Directors appointed to the board by BCAL Dx. This will include:

Jayne Shaw, Chairman

Jayne has extensive experience in the clinical, financial and commercial delivery of healthcare services. Jayne is Director and owner of Critical Assist Pty Limited and a major founding shareholder in BCAL Dx. She was co-owner and Chairman of the Sydney Breast Clinic prior its sale to Healthscope.

The Hon Ron Phillips, Managing Director

Ron Phillips is a founder shareholder of BCAL Dx. Initially an accountant by training, Ron has had a long and distinguished career in politics (1984 to 1999), ultimately serving as the Minister for Health in

the New South Wales Government and Deputy Leader of the NSW Parliamentary Liberal Party. Ron subsequently developed a successful consulting business in the Health and Aged Care Industry. He became co-owner and Managing Director of the Sydney Breast Clinic prior to its sale to Healthscope. He is currently Chair of the Sydney Local Health District.

Dr Peter French – Director & Scientific Advisor

Peter has extensive experience in both basic and clinical medical research and commercialisation of biological intellectual property. His research areas of expertise include cell biology, immunology, infectious disease (including HIV/AIDS), neurobiology and oncology. He is currently Executive Director of Bioxyne Ltd (ASX:BXN) and was formerly Chief Executive and Managing Director of Benitec Biopharma Ltd (ASX:BLT).

Jonathan Trollip – Director

Jonathan has 30 years legal and commercial experience in the international financial sector. He is currently a Principal and Director of Sydney based structured finance group Meridian International Capital Limited with whom he has been for the past 20 years. Prior to that, Jonathan was a Partner with Herbert Smith Freehills (previously Freehills). He holds various public and private Board positions including Chairman of two ASX listed investment companies.

It is intended that the current board of SPX will resign at completion of the BCAL Dx acquisition.

Chapter 11 of the ASX Listing Rules

The BCAL Dx acquisition will result in the application of Chapter 11 of the Listing Rules in relation to SPX due to a significant change in the nature and scale of SPX's activities.

As such, the Company proposes as part of the BCAL Dx acquisition to:

- (a) obtain shareholder approval for the purposes of Listing rule 11.1.2; and
- (b) re-comply with Chapters 1 and 2 of the ASX Listing Rules pursuant to Listing Rule 11.1.3.

In accordance with the rules of admission, SPX is required to satisfy a number of conditions. As such, SPX is required to lodge a prospectus pursuant to section 710 of the *Corporations Act 2001* (Cth), pursuant to which the Company intends to undertake a capital raising to raise at least \$3,500,000 at an issue price to be determined. Details of the capital raising will be announced to shareholders as soon as they have been finalised by the Board.

The Company's shares have been placed in suspension until the Company's recompliance with Chapters 1 and 2 of the Listing Rules.

Indicative Capital Structure

The table below outlines the indicative capital structure of SPX based on the assumptions below. SPX reserves the right to vary the assumptions relating to the proposed share consolidation and the proposed capital raising. Final details of the capital structure will be outlined in the notice of meeting which will be sent to shareholders.

Under the final transaction structure BCAL Dx vendors will hold 65% of the issued share capital of SPX on a fully diluted basis (after the share consolidation and capital raising), and for indicative purposes in the table below SPX has assumed a consolidation of 20:1 and a price of 20 cents per share.

Description	SPX Ordinary Shares	
	Pre-Consolidation	Post-Consolidation
Current Issued Capital	307,404,406	15,370,220
Prospectus share issue		17,500,000
Shares to be issued to BCAL Dx Vendors		61,044,695 (65% of total Shares below)
Total Post-Completion		93,914,915

Prospectus Capital Raising

SPX will prepare and issue a necessary disclosure document to raise sufficient funds to enable the re-compliance with Chapters 1 and 2 of the ASX Listing Rules. Funds raised will be used to develop BCAL opportunities, and to cover the ongoing administration costs of the Company.

Indicative Timetable

The indicative timetable for completion of the BCAL Dx transaction, including the shareholder's meeting, and the Company's re-compliance with the ASX listing rules, including the proposed capital raising, is outlined below.

Event	Date
Dispatch notice of meeting	25 July 2016
Lodgment of Prospectus with ASIC	25 July 2016
Shareholder meeting to approve the acquisition and related matters	29 August 2016
Expected completion date for offer under the Prospectus	2 September 2016
Completion of acquisition and issue of shares under the Prospectus	5 September 2016
Recommence trading on the ASX	12 September 2016

Note: Indicative timetable only and subject to change at the Company's discretion.

For further information please contact:

MR ANTHONY BARTON
NON-EXECUTIVE CHAIRMAN
Spectrum Rare Earths Limited
(08) 9325 8888