

26 October 2022

## **STRATEGIC PARTNERSHIP WITH NORTHERN MINERALS RARE EARTHS CONCENTRATE SUPPLY**

Iluka is pleased to announce it has entered into an agreement with Northern Minerals Limited (ASX:NTU) (Northern) for the supply of rare earths concentrate. The agreement is for the supply of all available concentrate from Northern's Browns Range project, until the delivery of contained rare earth oxide (REO) has reached 30.5kt.

Subject to Northern developing Browns Range, Northern's concentrate will be a valuable additional source of feedstock for Iluka's Eneabba rare earths refinery in Western Australia and will be a significant contributor to establishing the Eneabba refinery as a long term producer of highly valued heavy, as well as light, permanent magnet REOs.

To support Northern's development of Browns Range, Iluka will make an initial investment of \$20 million in Northern via a convertible note (\$15 million) and share placement (\$5 million). This will provide Northern the funding required to complete a definitive feasibility study (DFS), promoting delivery of a final investment decision (FID) on Browns Range over the next year.

In addition to the initial investment:

- Iluka has committed to provide additional equity funding towards Browns Range post FID through a further placement, subject to certain conditions; and
- subject to shareholder approval, Iluka and Northern have agreed to the grant of put and call options over additional Northern shares.

This provides Iluka with a pathway up to an ultimate 19.9% shareholding in Northern.

A summary of the key terms and conditions of the supply arrangements and the subscription option arrangements is contained in Appendix A of this announcement.

### **Northern and Browns Range**

Northern is an ASX listed company focussed on developing its Browns Range rare earths project in the eastern Kimberley region of Western Australia. Browns Range consists of seven deposits, with a total Mineral Resource of 10.8Mt.<sup>1</sup> Wolverine is the largest of these deposits with a Mineral Resource of 6.4Mt and the focus of the DFS. Project parameters encompass mining and concentrating and Northern has the potential to produce an attractive source of direct feed for Iluka's Eneabba refinery.

The rare earth bearing mineral at Browns Range is xenotime, which is characterised by high dysprosium (Dy) and terbium (Tb) assemblage of 10.0% in REO at Wolverine. Dy and Tb are the valuable 'heavy' permanent magnet rare earths. They improve magnetic performance and provide temperature resistance to the permanent magnets used in electric vehicles and wind turbines. They are also used

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<sup>1</sup> References in this announcement to Mineral Resources estimates for Browns Range have been extracted from Northern's ASX announcement "Independent review increases Wolverine REE Mineral Resource estimate by 47% at Browns Range" dated 10 October 2022. In addition, information in this announcement relating to the Browns Range Project is based on information provided by Northern. In each case this information has not been independently verified by Iluka.

in a number of specialised defence applications, such as in guidance and control systems. Most of the world's supply of Dy and Tb is currently derived from ionic clay deposits in China and Myanmar.

Northern's high assemblage of heavy REOs complements Iluka's portfolio. Iluka's Eneabba stockpile is dominant in monazite (with some xenotime), with a high assemblage of the valuable 'light' REOs of neodymium (Nd) and praseodymium (Pr). Iluka's Wimmera deposits contain both monazite and xenotime, with a higher proportion of heavy REOs relative to the Eneabba stockpile. Further detail is provided in Appendix B.

Northern expects that the DFS for Browns Range will take 12-15 months and first production is targeted for 2025-26. This timing aligns with the planned commissioning and ramp up of Iluka's Eneabba refinery.

### **Concentrate supply agreement and production**

The supply agreement between Iluka and Northern covers all Browns Range production up to 30.5kt of REO equivalent xenotime concentrate; at a targeted delivery profile building over the first four years post commissioning (of Browns Range) to up to ~5ktpa REO; at a targeted average grade of 25% REO. Pricing of the concentrate will include a fixed price component based on contained REO and an upside price sharing mechanism based on realised selling price.

### **Iluka's investment**

Iluka is initially investing \$20 million in Northern by way of the Tranche 1 share placement (\$5 million, at \$0.04 per share) and the convertible note (\$15 million) to fund the completion of the Browns Range DFS. The \$15 million 7% coupon convertible note matures on 31 December 2024, with a conversion price at a 20% premium to the Tranche 1 placement (being \$0.048 per share), subject to customary adjustments.

In addition to the initial investment:

- Iluka has also committed additional equity funding through a further placement, subject to certain conditions; and
- subject to shareholder approval, Iluka and Northern have agreed to the grant of put and call options over additional Northern shares (at the same price as the further conditional placement).

This commitment for the Tranche 2A placement and the agreement to enter into the Tranche 2B put and call arrangements support the potential future capital raising contemplated for the development of Browns Range. Iluka's participation in the Tranche 2A placement and the ability for Northern to exercise its put option depends on certain conditions being satisfied, which go to ensuring that the development of Browns Range and the overall investment proposition remains consistent with Iluka's expectations. The aggregate of the initial investment, the Tranche 2A placement and the exercise of the Tranche 2B put or call option has the potential to take Iluka's shareholding in Northern up to 19.9% (subject to dilution through any other issues of securities by Northern in which Iluka does not participate; Northern has confirmed to Iluka that no material issues are contemplated as of today).

### **Eneabba rare earths refinery**

Iluka announced FID for the Eneabba refinery on 4 April 2022,<sup>2</sup> with first production scheduled for 2025. The development is fully funded under a risk sharing arrangement between Iluka and the Australian Government. The refinery will be fully integrated, producing light and heavy separated REOs

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<sup>2</sup> Refer ASX release *Eneabba Rare Earths Refinery Final Investment Decision*, 4 April 2022.

and capable of processing feedstocks from Iluka's portfolio and from a range of third party suppliers. This includes both mineral sands and rare earths deposits, with Browns Range being an example of the latter.

### **Managing Director commentary**

Iluka's agreement with Northern is a further step towards delivering on the significant, industry building opportunities presented by the development of Australia's first fully integrated rare earths refinery at Eneabba.

Previously, intermediate rare earth products such as Northern's concentrate would require export overseas prior to refining to produce separated REOs. This is no longer the case. Iluka's agreement with Northern demonstrates the Eneabba refinery's strategic importance in fostering new supply chains for critical minerals that are essential to global electrification and the transition to a low carbon economy. There is mutual commercial benefit for both parties, as well as for downstream consumers of rare earths; and the value addition will occur in Australia for the first time.

Iluka's funding contribution provides Northern the means to complete its DFS and, subject to that, proceed to FID on Browns Range next year. For Iluka, it's an attractive opportunity to secure an additional source of quality feedstock for the Eneabba refinery. Browns Range aligns strongly with Iluka's strategy in terms of location, timing and product differentiation. We are delighted to have reached agreement with Northern to support this important development.

Northern's feedstock is uncommon globally in that it has an elevated assemblage of Dy and Tb. These highly sought after heavy rare earths will be an important part of the product offering from the Eneabba refinery. Just as Iluka's leading position in zircon has underpinned our competitive advantage in mineral sands over the past decade, the production of high value heavy REOs in Australia will be an important differentiator for our rare earths business in the decades to come.

The Eneabba refinery has been designed with the capability to process multiple feedstocks. In addition to the Eneabba stockpile and Northern's concentrate, Iluka continues to progress other sources of internal and external feed. A key source among these is our Wimmera project in Victoria, which is currently the subject of a pre-feasibility study that is due for completion at the end of 2022.

This document was approved and authorised for release to the market by Iluka's Managing Director.

### **Investor and media enquiries**

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## APPENDIX A – KEY TERMS AND CONDITIONS

### Key terms of the supply agreement

Conditions	<p>The Supply Agreement is subject to the satisfaction of certain key conditions, including:</p> <ul style="list-style-type: none"> <li>Northern granting security to Iluka over its assets including the grant of a mining mortgage;</li> <li>Northern completing the DFS;</li> <li>Northern making a positive Final Investment Decision in relation to the Browns Range Project;</li> <li>Northern achieving financial close and first draw-down under its financing arrangements for the Browns Range project.</li> <li>Iluka achieving financial close and first draw-down under its financing arrangements for the Eneabba rare earths refinery.</li> <li>Iluka obtaining any approval required for the Supply Agreement under its financing arrangements for the Eneabba rare earths refinery.</li> </ul> <p>Iluka also has a right to terminate the agreement if the Browns Range Project does not achieve first commercial production by 30 June 2028 (assessed by reference to Browns Range being fully commissioned and achieving a specified production target).</p>
Price	Pricing of the concentrate will include a fixed price component based on contained REO and an upside price sharing mechanism based on realised selling price.
Product	Xenotime concentrate produced from the Browns Range Project that meets the specifications under the Supply Agreement.
Supply period	Commencing on the Supply Start Date and ending on the earlier of the date when 30.5kt of contained REO has been delivered or NTU permanently ceasing production of any material from Browns Range.
Security	Secured by way of combination security agreement and mining mortgage

### Key terms of the subscription arrangements (Tranche 2A placement and Tranche 2B put and call options)

Terms	<p>(Tranche 2A) Offer of up to 230.0 million Northern shares; and (Tranche 2B) Grant of a put option (in favour of Northern) and a call option (in favour of Iluka) over the lower of:</p> <ul style="list-style-type: none"> <li>653.3 million Northern shares; and</li> <li>such number of shares as would result in Iluka acquiring an ultimate 19.9% shareholding in Northern</li> </ul> <p>(expiring 31 December 2025), in each case, subject to any adjustment pursuant to a share consolidation or share split and satisfaction of the applicable conditions.</p>
Conditions	<p>Tranche 2A is subject to the satisfaction of certain key conditions precedent, including:</p> <ul style="list-style-type: none"> <li>Northern making a positive FID in relation to the Browns Range project</li> <li>Northern having sufficient funds to fully-fund the pre-production costs of the Browns Range project</li> <li>Iluka completing due diligence on Northern's DFS that is satisfactory to Iluka (acting in good faith)</li> <li>The supply agreement having not been terminated.</li> </ul> <p>Tranche 2B (being the put and call options) is subject to Northern shareholders approving the grant of the call option in favour of Iluka for the purposes of Chapter 7 of the ASX Listing Rules. The ability of Northern to exercise the put option is also</p>

	conditional on the same conditions as the Tranche 2A placement. Iluka will be able to exercise the call option at any time after shareholder approval (for the issue of the call option) is received.
Price	The price for both the issue of the Tranche 2A placement and the exercise of the Tranche 2B put and call options is the lower of: <ul style="list-style-type: none"> <li>• If Northern shareholders approve the grant of the call option over Tranche 2B shares to Iluka, 6.0c per share;</li> <li>• If Northern shareholders do not approve the grant of the call option over Tranche 2B shares to Iluka, 5.2c per share; and</li> <li>• If Northern completes an equity raising to fund the pre-production costs of the Browns Range project, the price at which shares are issued under that equity raising,</li> </ul> in each case, adjusted for any share split or share consolidation.
Participation rights	Northern has agreed to use reasonable endeavours to provide Iluka the opportunity to participate in any future Northern equity raising to fund the pre-production costs of Browns Range, endeavouring to maximise Iluka's participation up to a total percentage holding of 19.9%. This obligation is subject to customary exceptions and would only be on the same terms and price as other participants in the applicable equity raising.

#### Key terms of the Convertible Note

Conversion price	4.8c per share, subject to customary adjustments
Coupon	7% (capitalised)
Face value	\$15 million
Maturity Date	31 December 2024
Convertibility	Convertible by <ul style="list-style-type: none"> <li>• Iluka: at any time before the Maturity Date; and</li> <li>• Northern: at any time after both Tranche 2A Completion and Tranche 2B Completion occur.</li> </ul>
Redeemability	Redeemable at the maturity date or by: <ul style="list-style-type: none"> <li>• Iluka: following an event of default or a change of control of Northern; and</li> <li>• Northern: at any time (subject to Iluka's conversion right).</li> </ul>
Security	Secured by way of combination security agreement and mining mortgage

**APPENDIX B – RARE EARTH OXIDE ASSEMBLAGE, PERCENTAGE OF TOTAL RARE EARTH OXIDE**

	Iluka deposits <sup>3</sup>		Northern Minerals deposits <sup>4</sup>
	Eneabba stockpile	Wimmera	Wolverine
Lanthanum (La)	21.8%	17.7%	2.0%
Cerium (Ce)	45.0%	37.4%	5.0%
Praseodymium (Pr)	4.6%	4.0%	0.7%
Neodymium (Nd)	16.6%	16.1%	3.2%
Promethium (Pm)	0.0%	0.0%	0.0%
Samarium (Sm)	2.5%	2.7%	2.2%
Europium (Eu)	0.1%	0.1%	0.5%
Gadolinium (Gd)	1.4%	2.3%	5.8%
Terbium (Tb)	0.2%	0.3%	1.3%
Dysprosium (Dy)	0.9%	2.0%	8.7%
Holmium (Ho)	0.2%	0.4%	1.8%
Erbium (Er)	0.5%	1.2%	5.2%
Thulium (Tm)	0.1%	0.2%	0.7%
Ytterbium (Yb)	0.4%	1.1%	4.1%
Lutetium (Lu)	0.1%	0.1%	0.6%
Scandium (Sc)	0.0%	0.0%	0.0%
Yttrium (Y)	5.6%	14.2%	58.3%
	100%	100%	100%

<sup>3</sup>. The rare earth oxide assemblage is the rare earth assemblage of the monazite plus xenotime expressed as a percentage distribution of rare earth metals as oxides (REO).

<sup>4</sup> Northern Minerals ASX announcement “Independent review increases Wolverine REE Mineral Resource estimate by 47% at Browns Range” dated 10 October 2022.