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IONICRE APPOINTS MINCORE FOR MAKUUTU FEASIBILITY STUDY

- **Mincore appointed to deliver Makuutu Feasibility Study**
- **Engineering due to commence with an initial review to identify and evaluate trade-off opportunities on Project CAPEX and OPEX**
- **IonicRE evaluating Makuutu ramp up including module sequencing as part of initial review**

The Board of Ionic Rare Earths Limited ("IonicRE" or "The Company") (ASX: IXR) is pleased to advise that the Company has awarded Melbourne based Mincore Pty Ltd ("Mincore"), the Engineering Manager role for the completion of a Feasibility Study (FS) for its 51% owned Makuutu Rare Earths Project ("Makuutu" or "the Project").

IonicRE has commenced the FS and will now work closely with Mincore to complete the process plant and associated non-process infrastructure for Makuutu. Mincore will work with the IonicRE owner's team to compile the FS report, which will be submitted to the Ugandan Directorate of Geological Survey and Mines (DGSM) as part of the Company's submission for a Mining Licence Application (MLA) by October 2022.

Mincore will initially complete a review of the Project including looking for opportunities for CAPEX optimisation. Mincore's appointment for the FS phase followed a competitive tender process, to select a contractor with suitable experience and capabilities to complete the engineering design as well as the subsequent oversight on the completion of the FS.

Mincore has assembled a competent team to support the IonicRE owners' team, with direct experience in recently completing a heap leach project in elevated rainfall conditions and is also presently working on FEED project activities in Africa. Mincore is expected to be able to significantly assist IonicRE with rapidly advancing the FS activity utilising their extensive African network of specialty service providers.

Commenting on the engagement of Mincore, Ionic Rare Earths Managing Director Mr. Tim Harrison commented: *"We are delighted to have awarded the FS Engineering Management scope to Mincore. The team at Mincore presented a very complimentary skillset to the IonicRE owners' team, and their recent experience in similar technology applications provides IonicRE with some immediate optimisation opportunities worthy of consideration for Makuutu."*

"The Company has made significant progress over the past few months, ensuring the optimal team is in place and work programs are now underway to meet our accelerated timelines. This next 6

months will see a continued increase in activity, highlighted by the current drill program, which will greatly enhance the Project's resource definition, key to unlocking a robust Feasibility Study over the next 12-18 months."

Commenting on being awarded the Makuutu FS, Mincore Managing Director Mr. Cameron Bain said: *"We are pleased to be awarded the Engineering Manager Role for the Makuutu Project. Mincore's In-house Process and African experience will complement the IonicRE Owners Team, and I'm certain our recent experience in heap leach and similar technologies will unlock immediate opportunities to be considered for the FS. The Mincore team is looking forward to supporting a fast-track development timeline and to add value for the stakeholders"*.

The Company will provide updates to the market as progress continues with the advancement of the Project.

Authorised for release by the Board.

For enquiries, contact: Tim Harrison
Managing Director
+61 8 9481 2555

About Mincore Pty Ltd

Mincore Pty Ltd ("Mincore") is a team of highly experienced engineers and designers, specialists in providing innovative solutions to the process, materials handling and metals industries. Mincore's head office is located in Melbourne with regional offices in London, Senegal, Philippines, Ghana, Fiji, Tasmania and Switzerland.

Mincore's broad spectrum of skills within the engineering team allows flexible and efficient working and the ability to address specific Client requirements while retaining a high work standard, tailoring technical solutions to whatever is the most advantageous for each project.

About Makuutu Rare Earths Project

The Makuutu Rare Earths Project is an ionic adsorption clay ("IAC") hosted Rare Earth Element ("REE") deposit located 120 km east of Kampala in Uganda and is well serviced by existing high quality infrastructure including roads, rail, power infrastructure and cell communications. The installed infrastructure is illustrated in Figure 1.

The deposit stretches 37 km in length and has demonstrated potential for a long life, low-cost capital source of critical and heavy rare earths. These IAC deposits are prevalent in southern China which have been the source of the world's lowest cost critical and heavy REE production, however these deposits are gradually being exhausted and Makuutu represents one of only a handful of such deposits outside of southern China.



Figure 1: Makuutu Rare Earths Project Location with major existing infrastructure

The Makuutu deposit is shallow, with less than 3 m of cover over a 9 m average thickness clay and saprolite zone which results in low-cost bulk mining methods with low strip ratio. A maximum thickness of 19.5 m has been identified at Makuutu. Processing is via simple acidified salt desorption heap leaching, breaking the chemical ionic bond which washes the rare earths (in a chemical form) from the ore into a pregnant leach solution (“PLS”). The PLS is concentrated up using membrane technology, from which the rare earths are precipitated as a mixed rare earth carbonate product; a product which attracts both a higher payability and achieves a high basket price due to the dominant high value critical and heavy rare earths which make up over 70% of the product basket.

The Project has the potential of generating a high margin product with an operation life exceeding 27 years. The Project is also prospective for a low-cost Scandium co-product.

Existing Infrastructure

One of the Makuutu Rare Earths Project’s competitive advantages is its proximity to existing infrastructure. The Makuutu site is approximately 10km from Highway 109 which is a sealed bitumen road connecting to Kampala, to Kenya and on to the Port of Mombasa. All weather access roads connecting the site to the adjacent sealed bitumen highway are already existing. A rail line lies within 10 kilometres north of the Makuutu site near the town of Iganga. There are four hydroelectric power plants located within 65 km of the project area, with total installed generating capacity of approximately 810 MW, providing an abundant supply of cheap power to the Project.

Water will be sourced at the project by harvesting water from the Makuutu site, given the Project location in a positive rainfall environment, and a net positive process water balance will require membrane processes to be used to process site discharge water for reagent recovery. Excess water

management will be a key focus of the Project to ensure environmental standards are met and reagent consumption is minimised.

A workforce of semi-skilled and artisanal workers is available in nearby towns and population centres. The closest major population centre is Iganga, which has a population of 50,000. The town of Mayuge is approximately 10 km from the Project site and the intent is to source local operations staff from the immediate districts and train staff accordingly. The operation is to be staffed by a residential workforce. No fly in – fly out is envisaged, and the number of expatriate staff is intended to be low, and to be phased out over time. Industrial facilities are available in the city of Jinja, approximately 40 km from the Project area. Additional industrial facilities are available on the outskirts of Kampala.

Forward Looking Statements

This announcement has been prepared by Ionic Rare Earths Limited and may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Ionic Rare Earths Limited. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Ionic Rare Earths Limited does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions or circumstances on which any such forward looking statement is based.