

8 July 2021

DIPLOMAT AND MULTI-NATIONAL MILITARY NEGOTIATOR JOINS IONICRE BOARD

The Board of Ionic Rare Earths Limited (“IonicRE” or “the Company”) (ASX: IXR) is pleased to advise that as part of its strategy towards increasing its presence in North America, the Company has appointed Ms. Jill Kelley as an Executive Director to drive engagement with key stakeholders and potential end-users in the US. The appointment of Ms. Kelley is expected to greatly aid the progression of key relationships with global groups, including but not limited to those in the US.

Ms. Kelley has previously held roles at the highest levels of international leadership and has played a crucial role in supporting U.S. military operations spanning over 60 countries, collectively known as the U.S. Coalition Allies. Ms. Kelley's networks in, and knowledge of, Europe, the Middle East, Asia, and South and Central America have helped advance American interests during the most critical points in current history.

As former honorary ambassador to U.S. Central Command General Mattis and CIA Director David Petraeus, Ms. Kelley met regularly with Royals, Presidents, Prime Ministers, and Parliamentarians to foster military, security, and economic relationships. Ms. Kelley received the Pentagon's esteemed Joint Chiefs of Staff Award for her leadership, along with the Multi-National Military Forces Award, an honour only bestowed upon a few individuals.

As a former diplomat, Ms. Kelley was the youngest appointed Honorary Consul General to South Korea. Ms. Kelley's title was bestowed by the President of the Republic of South Korea for her ability and expertise to influence and advance international security, trade and economic opportunities including her help in passing the ROK Free Trade Agreement.

In 2017, Ms. Kelley became President of Military Diplomacy Strategies, an international advisory firm that counsels embassies and advises multi-national companies with an in-depth analysis of geopolitical challenges with security, trade and economic opportunities across the global community. In this role, Ms. Kelley made high level introductions, advanced government and corporate relations, helped execute strategic partnerships and oftakes, and facilitated cross-border relationships on a global scale.

Chairman Mr. Trevor Benson commented: *“On behalf of the Board of IonicRE, I am very pleased to welcome Ms. Kelley as an Executive Director. We believe that with her extensive experience globally and within strategic areas of US Government and connections to key industries that require secure supply of critical commodities (as defined by the US Government) IonicRE has the potential to become a serious contender in providing end users with rare earths critical to the development of offshore wind turbine “Green Energy”. Undoubtedly, with IonicRE's focus on delivering secure supply of rare earth products to the US, Ms. Kelley will be a valuable addition to the IonicRE team, to*

negotiate with potential US stakeholders including at high levels within US Government. The addition of Ms. Kelley will enhance IonicRE's capacity to deliver secure sustainably sourced supply of rare earths to the ever-expanding electric vehicle, communications and defence industries."

Managing Director Mr. Tim Harrison commented: *"The appointment of Ms. Kelley is an important step in further engaging with potential end users and our increased corporate activity within the US. The Board of IonicRE has always maintained the position that the Makuutu Rare Earth Project is large enough to have the potential to support multiple strategic partners. Ms. Kelley will greatly assist the Board of IonicRE to now capitalise on the unique appeal of Makuutu, and formalising partnerships to enable IonicRE to maximise the value of the basket, specifically the forecast supply constrained heavy rare earth oxides."*

Newly appointed Executive Director Ms. Jill Kelley commented: *"I am pleased to join the prestigious Board of IonicRE, and I look forward to catalysing IonicRE's global footprint through strategic partnerships and public-private ventures to create a scalable and sustainable Rare Earth Element project during this critical time for the rare earth industry."*

Remuneration

As an Executive Director, Ms. Kelley will be entitled to a consulting fee of US\$10,000 per month. No director's fees will be paid. In addition, subject to shareholder approval, as a sign-on fee Ms. Kelley will be issued 3.5 million shares in IonicRE and 3.5 million performance shares which will vest when IonicRE signs its first offtake agreement/strategic partnership as a result of Ms. Kelley's introduction.

Authorised for release by the Board of IonicRE.

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About Makuutu Rare Earths Project

The Makuutu Rare Earths Project ("Makuutu") 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 Company will move to 60% ownership of Makuutu on the completion of the Feasibility Study and has a pre-emptive right over the remaining 40% stake in Makuutu.

The deposit at Makuutu 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.

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.

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



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

Existing Infrastructure

One of Makuutu’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 Makuutu project area, with total installed generating capacity of approximately 810 MW, providing an abundant supply of cheap power to Makuutu.

Water will be sourced at Makuutu 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 Makuutu 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.