Ucore Acquires a Third Rare Earth Element Feedstock for Commercial Demonstration Plant Commissioning Trials

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- **Ucore has recently acquired more than 2 tonnes of a mixed light rare earth element (REE) chemical concentrate derived from a US mineralization source**
- **This light REE feedstock is the third and final feedstock the Company will use during commissioning trials at its Kingston, Ontario, RapidSX™ Demonstration Plant:**
    - **The Company has also incorporated mixed chemical concentrates created from a synthetic monazite blend and a heavy mixed rare earth oxide acquired from a US-friendly ionic clay mineralization source**

June 29, 2023 (Source) – Ucore Rare Metals Inc. (TSXV: UCU) (OTCQX: UURAF) ("Ucore" or the "Company") is pleased to announce the acquisition of its third mixed rare earth element ("REE") chemical concentrate at the Company's RapidSX™ Commercialization and Demonstration Facility ("CDF") in Kingston, Ontario. This light REE feedstock is from a US mineralization source and will be incorporated into the commissioning process for the 52-Stage RapidSX™ Demonstration Plant ("Demo Plant") for the separation of mixed heavy and light REE chemical concentrates. It follows two other mixed chemical concentrates that are utilized in the commissioning process, a) a synthetic light mixed rare earth oxide blend modeled in a monazite source and b) a heavy mixed rare earth oxide acquired from a US-friendly ionic clay mineralization source.

Ucore's RapidSX™ commissioning program is a first-of-a-kind in North America. It consists of processing all three light and heavy REE feedstocks through the same Demo Plant circuit and, in parallel, a corresponding 52-stage conventional solvent extraction ("**SX**") mixer settler pilot plant to obtain direct comparative results between the two processes. Once the commissioning process is complete, Ucore will commence its heavy REE demonstration and qualification program with the US Department of Defense ("**DoD**"). This US$4 million project from the US government was announced on June 6, 2023, and represents a significant stepping stone in Ucore's transition to the commercial deployment of its RapidSX™ REE separation technology platform in Alexandria, Louisiana.



Figure 1 – Separated Heavy REE (from Ionic Clay Sourced Material) Sample Products from the RapidSX™ Demo Plant Commissioning Trials

“We believe that Ucore’s Kingston, Ontario, Demo Plant is currently the largest heavy REE separation plant in North America,” stated ***Mike Schrider, Ucore Vice President and Chief Operating Officer****. “It is capable of processing tens of tonnes of light and heavy REEs utilizing the exact same equipment – and represents a unique technological advantage as North America endeavors to compete on the global stage to produce individual rare earth oxides required to support the growing EV industry.”*

“The underway commissioning process at the CDF is the single most significant leap in the development of the RapidSX™ technology platform and, once completed, will open the pathway to direct commercialization and monetization of Ucore’s business model.”

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About Ucore Rare Metals Inc.

Ucore is focused on rare- and critical-metal resources, extraction, beneficiation, and separation technologies with the potential for production, growth, and scalability. Ucore’s vision and plan is to become a leading advanced technology company, providing best-in-class metal separation products and services to the mining and mineral extraction industry.

Through strategic partnerships, this plan includes disrupting the People’s Republic of China’s control of the North American REE supply chain through the near-term development of a heavy and light rare-earth processing facility in the US State of Louisiana, subsequent SMCs in Canada and Alaska and the longer-term development of Ucore’s 100% controlled Bokan-Dotson Ridge Rare Heavy REE Project on Prince of Wales Island in Southeast Alaska, USA.

Ucore is listed on the TSXV under the trading symbol “UCU” and

in the United States on the OTC Markets' OTCQX® Best Market under the ticker symbol "UURAF."

For further information, please visit www.ucore.com/corporateupdate.

Forward-Looking Statements

This press release includes certain statements that may be deemed "forward-looking statements." All statements in this release (other than statements of historical facts) that address future business development, technological development and/or acquisition activities (including any related required financings), timelines, events, or developments that the Company is pursuing are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance or results, and actual results or developments may differ materially from those in forward-looking statements.

Regarding the disclosure in the press release above about the US DoD project and the expected successful progress of the project and the resulting milestone payments from the DoD, the Company has assumed that the project (including each of its milestones) will be completed in a satisfactory manner and in a reasonable period of time within approximately the next two years. For additional risks and uncertainties regarding the Company, the CDF, the Demo Plant and the Project (generally), see the risk disclosure in the Company's MD&A for Q1 2023 (filed on SEDAR on May 30, 2023) (www.SEDAR.com) as well as the risks described below.

Regarding the disclosure above in the "About Ucore Rare Metals Inc." section, the Company has assumed that it will be able to procure or retain additional partners and/or suppliers, in

addition to Innovation Metals Corp. ("IMC"), as suppliers for Ucore's expected future Strategic Metals Complexes ("SMCs"). Ucore has also assumed that sufficient external funding will be found to complete the Demo Plant commissioning and demonstration schedule and also later prepare a new National Instrument 43-101 ("NI 43-101") technical report that demonstrates that the Bokan Mountain Rare Earth Element project ("Bokan") is feasible and economically viable for the production of both REE and co-product metals and the then prevailing market prices based upon assumed customer offtake agreements. Ucore has also assumed that sufficient external funding will be secured to continue the development of the specific engineering plans for the SMCs and their construction. Factors that could cause actual results to differ materially from those in forward-looking statements include, without limitation: IMC failing to protect its intellectual property rights in RapidSX™; RapidSX™ failing to demonstrate commercial viability in large commercial-scale applications; Ucore not being able to procure additional key partners or suppliers for the SMCs; Ucore not being able to raise sufficient funds to fund the specific design and construction of the SMCs and/or the continued development of RapidSX™; adverse capital-market conditions; unexpected due-diligence findings; the emergence of alternative superior metallurgy and metal-separation technologies; the inability of Ucore and/or IMC to retain its key staff members; a change in the legislation in Louisiana or Alaska and/or in the support expressed by the Alaska Industrial Development and Export Authority ("AIDEA") regarding the development of Bokan; the availability and procurement of any required interim and/or long-term financing that may be required; and general economic, market or business conditions.

Neither the TSXV nor its Regulation Services Provider (as that term is defined by the TSXV) accept responsibility for the

adequacy or accuracy of this release.

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