Ucore Readies for Louisiana 2026 Heavy Rare Earth Element Processing

written by Raj Shah | December 11, 2025

Ucore Updates on Advancements and Accomplishments for:

US Department of War HREE Demonstration & RapidSX™ Technology US Transition Project from Ucore's –

Kingston, Ontario, CAN, Commercialization and Demonstration Facility

– to –

Alexandria, Louisiana, USA, Strategic Metals Complex & HREE Refinery

December 11, 2025 (Source) – Ucore Rare Metals Inc. (TSXV: UCU) (OTCQX: UURAF) ("**Ucore**" or the "**Company**") is pleased to update on its RapidSX™ rare earth element ("**REE**") separation technology commercialization progress and its USD$22.4 million U.S. Department of War ("**DoW**") Other Transaction Agreement ("**OTA**" or the "**Project**") through the U.S. Army Contracting Command-Orlando ("**ACC-ORL**").

Since the December 2023 start of the demonstration program, Ucore has operated and continuously improved its 52-Stage RapidSX™ Demonstration Plant ("**Demo Plant**") within the Company's Kingston, Ontario, Commercialization and Demonstration Facility ("**CDF**"). This work is dedicated to transitioning the Company's RapidSX™ separation technology to its under-construction Louisiana Strategic Metals Complex ("**SMC**") in Alexandria, Louisiana. The Louisiana SMC is a developing REE separation and oxide production facility focused on the production of mid

(**SmEuGd**) and heavy (initially **Tb and Dy,** potentially followed by **Y**, which is in high demand) rare earth elements with the ability to also produce an **NdPr** rare earth oxide ("**REO**") product.

The CDF work has focused on the precise manipulation of tonnes of a heavy mixed rare-earth oxide derived from a US-friendly feedstock resource through the series of RapidSX™ splits shown in Figure 1.

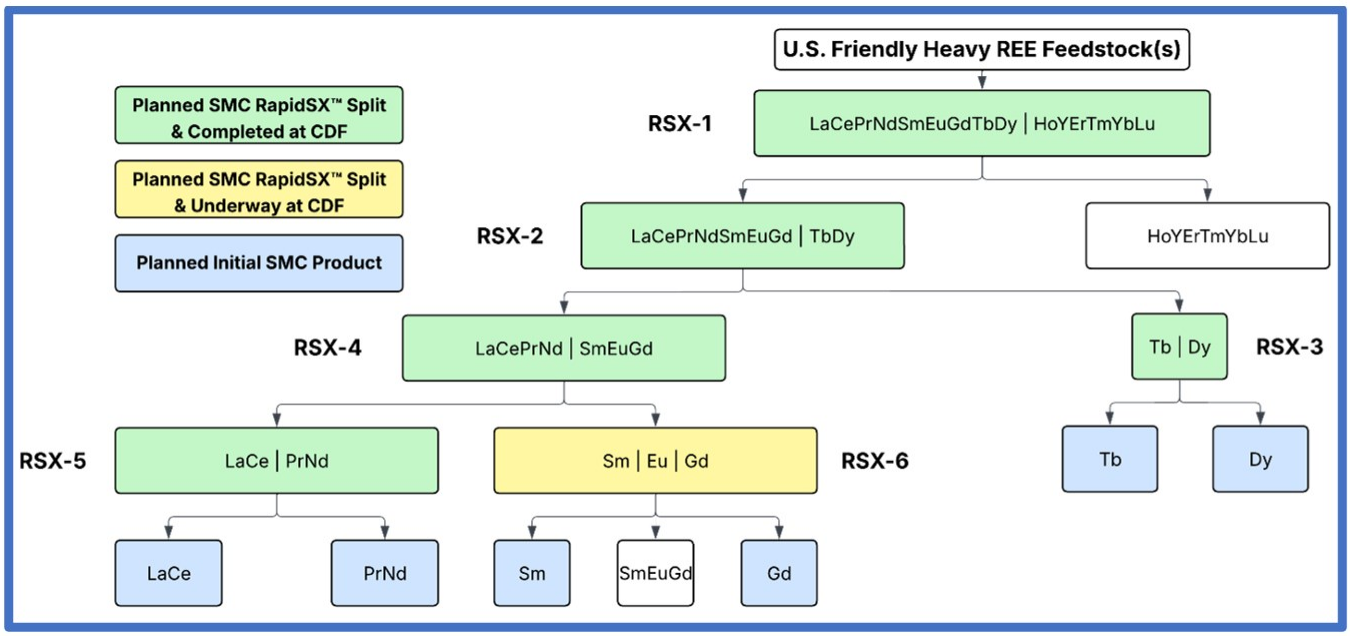

Figure 1 – CDF Heavy Rare Earth Processing Demonstration Trials – Road Map to the Louisiana SMC in 2026

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/1119/277748_9d138dff040b492b_001full.jpg

These splits represent the initial planned REO groups and products for the Louisiana SMC, and in every case have been directly compared to a 52-Stage Conventional Solvent Extractant ("**CSX**") pilot circuit at the CDF for direct purity and recovery comparisons.

Ucore's advancements and achievements on the Project that lead to Louisiana include:

- Completion of about **5,700 hours of REE processing with tonnes of heavy mixed rare earth oxides** ("**MREO**") **in an automated and simulated 24-hour per day commercial production environment**
- **Production of LaCe, NdPr, SmEuGd, Sm, Gd, HoYErTmYbLu, TbDy, Tb, and Dy** rare earth element groups and products, while:
    - Demonstrating **the use of one RapidSX™ Machine** (i.e., the Demo Plant) for all splits and multiple feed stocks
    - Instituting **a continuous improvement program** for the RapidSX™Technology Platform in preparation for copy and paste transfer to the Louisiana SMC
    - Developing **the ability to quickly (i.e., within hours) reconfigure the RapidSX™ unit operational equipment** (e.g., extract, scrub, strip, etc., components) for specific separation requirements
    - Honing the **ability to stop (i.e., for minutes, hours, days, or weeks) and immediately restart** for planned and unplanned events
    - Establishing **protocols for replicating precise and robust manipulation of the standard solvent extraction chemistry** within the RapidSX™ technology platform

- Construction of **a dedicated production environment ICPMS laboratory with seven days per week support** (to support 24/7 operations)
    - Analyzed over **25,000 samples proving that RapidSX™ and CSX yield virtually identical chemistry results**
    - Developed the **laboratory and sampling protocols for**

Louisiana SMC operations

- Proven* **RapidSX™ improvements over CSX** include:
  - Enhanced OPEX and more environmentally friendly operations through
    - **2 to 4 times faster throughput**
    - Constructed primarily from commercial-off-the-shelf (“**COTS**“) **equipment with a significantly reduced individual stage footprint**
    - Leading to **a smaller physical plant and environmental impact footprint and an overall CAPEX reduction**

**Quantitative affirmation in progress*

- Full commercial-scale Louisiana SMC work is underway for **the installation of RapidSX™ Machine #1 in mid-2026,** including:
  - Field and design engineering, including supporting infrastructure equipment
  - Permitting activities
  - Long lead material & equipment procurement
  - CDF scale-up trials for full-scale RapidSX™ Machine components
  - **Heavy feedstock procurement** for initial testing, commissioning, and trials
    - **Including coordination trials starting at the CDF and culminating at the Louisiana SMC**

"The nearly two years of CDF demonstration work undertaken by Ucore has been done with deliberate coordination with the Louisiana SMC production roll-out pathway. The result is a technically proven and de-risked commercialization pathway to commence heavy rare earth processing in Louisiana in 2026," stated **Mike Schrider, P.E., VP and COO of Ucore***. "With our planned sequential deployment of RapidSX™ Machines, based on the unique demonstrated ability to produce products with only one RapidSX™ Machine. Ucore has established a blueprint for smart deployment of capital, with minimal commercial risk, while getting to early heavy rare earth production within the United States of America –* ***a stated objective of the initial OTA****."*

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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 ("**Bokan**").

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.

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 amended OT Agreement and the expected successful progress of the project and the resulting milestone payments from the DoW, the Company has assumed that the project (including each of its milestones and the Company's objectives in this regard) will be completed in a satisfactory manner and in a reasonable period of time within approximately the next two years. Regarding the disclosure in the press release above about the other forms of government support for Ucore, the Company has assumed that the applicable projects (including each of the associated milestones) will be completed satisfactorily and in accordance with the respective agreements or letters of intent (as applicable) for such government support. For additional risks and uncertainties regarding the Company, its business activities, its ability to qualify for and receive any additional funding from any U.S. or Canadian government, the CDF and the aforementioned projects (generally), see the risk disclosure in the Company's MD&A for Q3-2025 (filed on SEDAR+ on

November 25, 2025) (www.sedarplus.ca) 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 SMCs. Ucore has also assumed that sufficient external funding will be found to continue and complete the ongoing research and development work required at the CDF and also later prepare a new National Instrument 43-101 technical report that demonstrates that 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 and eventual commissioning and operations. 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.

CONTACTS

Mr. Michael Schrider, P.E., Ucore Vice President and Chief Operating Officer, is responsible for the content of this news release and may be contacted at 1.902.482.5214.

For additional information, please contact:

Mark MacDonald
Vice President, Investor Relations
Ucore Rare Metals Inc.
1.902.482.5214
mark@ucore.com