Ucore Rare Metals Advances as Pentagon-Backed Refinery Reshapes U.S. Rare Earth Strategy

written by Tracy Hughes | September 23, 2025

On the site of a once-quiet Air Force base in central Louisiana, crews are remaking an 80,000-square-foot warehouse into what could become a cornerstone of America's critical minerals supply chain. Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF), a small Canadian company with big ambitions, broke ground this summer on its Strategic Metals Complex (SMC) in Alexandria. If successful, the facility will separate rare earth oxides used in electric vehicles, wind turbines, and defense systems — materials long dominated by China.

Since June, Ucore has moved from concept to execution, supported by both government funding and renewed investor interest. Its stock, which traded near C$1.20 in early summer, is now at approximately C$3.44* on the TSX Venture Exchange (TSXV: UCU) and around US$2.49* on the OTCQX (OTCQX: UURAF). That represents a threefold increase and brings the company close to a multi-year high. The momentum reflects a growing belief that Ucore is positioned to deliver on its long-stated plan to establish a North American rare earth supply chain. (*Stock prices were taken at 10:47 AM EST on September 18, 2025.)

Investor Sentiment Turns Positive

For much of the past decade, Ucore was a speculative name — its Alaska deposit at Bokan Mountain widely discussed but years from

development. What changed this summer was tangible progress in Louisiana, backed by Pentagon funding and state incentives. A June financing raised C$15.5 million, earmarked for advancing the SMC and securing offtake agreements. The raise was oversubscribed, and the pricing close to market levels signaled that institutional investors were willing to support the project without deep discounts.

The market's response has been swift. Trading volumes increased through July and August, with the stock climbing more than 150% from its June lows. Analysts covering the sector note that Ucore's market capitalization, now approximately C$285 million, still represents anticipation rather than current earnings. But the shift in sentiment suggests that investors see a more credible pathway to commercial revenue — an uncommon level of visibility for a junior mining company.

Fast-Tracking the Louisiana Refinery

The centerpiece of Ucore's strategy is the Louisiana SMC. The facility will employ the company's proprietary RapidSX™ technology, an evolution of conventional solvent extraction that promises faster and more efficient separation of rare earth elements. At a demonstration plant in Kingston, Ontario, Ucore has logged thousands of hours refining mixed concentrates, de-risking the technology before commercial deployment.

The Alexandria complex is being built in stages. The first phase targets about 2,000 tons per year of separated oxides by 2026, scaling up to 5,000–7,500 tons by 2028. Company statements suggest an even more ambitious target of 12,000 tons annually by 2027 if financing and market conditions allow. For context, that would represent roughly one-third of projected U.S. demand outside of China.

Location offers strategic advantages. The SMC sits within a Foreign Trade Zone, allowing duty-free import and export of materials. Feedstock could arrive from allied nations such as Australia or Greenland, be processed in Louisiana, and shipped to customers in Japan or the U.S. without tariff penalties. As CEO Pat Ryan shared with me earlier this year, "You can bring inputs from Brazil, process the material, and send it back to Japan for magnet making with no tariff consequence coming in or going out."

Government as Backstop

What distinguishes Ucore from many rare earth hopefuls is the extent of government backing. In June, the company secured an $18.4 million award from the U.S. Department of Defense, bringing its total Pentagon funding to $22.4 million since 2022. The money will help build and commission the first full-scale RapidSX production line in Louisiana. Unlike traditional loans or equity raises, these funds are non-dilutive, a direct subsidy to accelerate Ucore's development.

The grant comes under the DoD's Industrial Base Analysis and Sustainment program, which supports projects deemed essential for national security. U.S. policymakers have become increasingly explicit: China's control of rare earth refining, estimated at 80–90% of global capacity, represents a strategic vulnerability. Earlier this year, China imposed new export controls on seven rare earth elements – samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium – underscoring the fragility of existing supply chains.

Louisiana's state government has also contributed, providing roughly $15 million in incentives including tax abatements and infrastructure upgrades. Ottawa and Ontario have supplied smaller grants to support the Kingston pilot plant. The

cumulative effect is that Ucore is advancing its refinery with a meaningful portion of costs underwritten by public funds.

Securing Feedstock and Partnerships

Processing capacity is only as valuable as the material it can refine. In late August, Ucore announced a preliminary 10-year offtake agreement with Critical Metals Corp. (NASDAQ: CRML), which is developing the Tanbreez rare earth project in Greenland. The agreement would see up to 10,000 tons per year of concentrate shipped to Ucore's Louisiana and Canadian facilities, beginning as early as 2027. Tanbreez is notable for its high proportion of heavy rare earths like dysprosium and terbium, metals with critical defense and EV applications.

"This agreement represents a shared mission to lessen China's grip on the rare earth ecosystem in the West," Mr. Ryan said. For Critical Metals, the deal validates the Greenland project's commercial potential, while for Ucore it secures a non-Chinese source of critical feedstock just as its refinery is expected to scale.

Earlier this week, Ucore also partnered with Metallium Ltd. (ASX: MTM | OTCQX: MTMCF) of Australia to explore processing unconventional feedstocks — including magnet scrap, electronic waste, and fluorescent lamp phosphors. Metallium's "Flash Joule Heating" process can break down such materials into concentrates that RapidSX can then separate into oxides. If proven at scale, this partnership could give Ucore flexibility to diversify inputs and bolster its green credentials by recycling materials already in circulation.

A Broader Geopolitical Contest

The backdrop to Ucore's progress is a shifting geopolitical landscape. The U.S., Canada, Europe, and Australia have all declared rare earths essential to their energy and defense futures. China, meanwhile, has demonstrated a willingness to wield its dominance as a strategic tool. In this context, Ucore's Louisiana plant is not just a commercial venture but part of a broader industrial policy.

The risks are real. Rare earth markets are notoriously cyclical, with prices prone to sharp swings that can challenge even well-prepared producers. Execution risk also looms: Ucore must bring its refinery online on budget and on schedule, scale a new technology to commercial levels, and secure binding contracts with customers willing to pay for non-Chinese supply.

Yet the opportunity is equally stark. Global demand for rare earth magnets is forecast to grow at more than 8% annually through 2035, fueled by electric vehicles, renewable energy, and advanced defense systems. If Ucore meets its timelines, it could emerge as one of the first Western companies to provide significant heavy rare earth output at scale — a position that would attract not just investors but long-term customers and potentially further government support.

Outlook

As autumn approaches, Ucore Rare Metals finds itself in a position of rare leverage. It is well-funded, backed by the Pentagon and state incentives, and is building a refinery that could start producing within 18 months. Its shares have surged, its partnerships are broadening, and its mission aligns neatly with national security priorities.

For investors, the bet is clear: can a once-obscure junior miner translate policy momentum and pilot-plant success into commercial output at scale? If so, Ucore could become a pivotal player in reshaping how the West sources materials at the heart of the 21st-century economy.