

Aqua Metals Pioneers Domestic LFP Recycling with Breakthrough Bench-Scale Testing

LFP Integration Doubles Lithium Production Potential for Multi-Chemistry Battery Recycling at ARC Facilities

RENO, Nev., April 08, 2025 (GLOBE NEWSWIRE) -- Aqua Metals (NASDAQ: AQMS), a pioneer in sustainable lithium battery recycling, today announced the successful completion of bench-scale testing and engineering analysis for a novel process to recycle lithium iron phosphate (LFP) battery materials. This milestone highlights Aqua Metals' proven ability to rapidly adapt its technology to market needs, reinforcing its position as a leader in building a resilient, circular battery supply chain that retains critical mineral processing within the United States.

LFP batteries are rapidly becoming the dominant chemistry for electric vehicles and stationary storage due to their lower cost and safety advantages. However, their widespread adoption presents a significant recycling challenge, as iron-based cathodes with no nickel or cobalt have lower market value and global lithium prices remain suppressed. While most domestic recyclers continue to focus on higher-value chemistries, Aqua Metals is stepping ahead of the curve with a demonstrated approach to recovering lithium from LFP black mass—positioning itself as a first mover in addressing this critical and underserved segment of the U.S. battery supply chain.

"We believe this is an important step in our strategy to develop the most adaptable and scalable lithium battery recycling platform in the industry," said Steve Cotton, President and CEO of Aqua Metals. "Our ability to integrate LFP recovery into our existing plans demonstrates how we can evolve with market needs while maintaining a focus on efficiency, sustainability, and long-term impact."

The Company's engineering and technoeconomic analysis shows that the LFP recycling process can be integrated into the planned Sierra ARC facility and/or any ARC facility with an incremental capital expense of 25 to 30% and without the need to expand the facility's proposed physical footprint. The Sierra ARC is currently designed to process approximately 7,500 tonnes per year of NMC-type (nickel-manganese-cobalt) black mass. With the addition of LFP capabilities, the campus could process an additional 7,500 tonnes of LFP feedstock annually—potentially doubling its total feedstock throughput and importantly, doubling total lithium carbonate output to approximately 2,700 tonnes per year. Upon commissioning, this commercial-scale operation would increase the total current U.S. lithium production by more than 50% annually, making Aqua Metals one of the largest producers of domestic battery grade lithium carbonate.

"Recycling LFP batteries has posed a major technical hurdle for the industry due to its unique chemistry and limited market value," said Ben Taecker, Chief Engineering and Operating Officer at Aqua Metals. "This milestone demonstrates how adaptable our technology platform is — and positions Aqua Metals at the forefront of building the next generation of clean, scalable recycling solutions for the evolving battery landscape in North America."

With this advancement, Aqua Metals is positioning itself to meet the growing need for LFP recycling, ensuring that valuable lithium remains in the domestic supply chain and supporting U.S. leadership in clean energy and advanced manufacturing.

About Aqua Metals

Aqua Metals, Inc. (NASDAQ: AQMS) is reinventing metals recycling with its patented AquaRefining[™] technology. The Company is pioneering a sustainable recycling solution for materials strategic to energy storage and electric vehicle manufacturing supply chains. AquaRefining[™] is a low-emissions, closed-loop recycling technology that replaces polluting furnaces and hazardous chemicals with electricity-powered electroplating to recover valuable metals and materials from spent batteries with higher purity, lower emissions, and minimal waste. Aqua Metals is based in Reno, NV and operates the first sustainable lithium battery recycling facility at the Company's Innovation Center in the Tahoe-Reno Industrial Center. To learn more, please visit www.aquametals.com.

Aqua Metals Social Media

Aqua Metals has used, and intends to continue using, its investor relations website (https://ir.aquametals.com), in addition to its X, Threads, LinkedIn and YouTube accounts at https://x.com/AquaMetalsInc (@AquaMetalsInc), https://www.threads.net/@aquametalsinc (metals-limited and https://www.youtube.com/@AquaMetals respectively, as means of disclosing material non-public information and for complying with its disclosure obligations under Regulation FD.

Safe Harbor

This press release contains forward-looking statements concerning Agua Metals, Inc. Forward-looking statements include, but are not limited to, our plans, objectives, expectations, and intentions and other statements that contain words such as "expects," "contemplates," "anticipates," "plans," "intends," "believes", "estimates", "potential" and variations of such words or similar expressions that convey the uncertainty of future events or outcomes, or that do not relate to historical matters. The forward-looking statements in this press release include our expectations for our advancement of our LFP recycling process, including the expected benefits of such process.. Those forward-looking statements involve known and unknown risks, uncertainties, and other factors that could cause actual results to differ materially, including, but not limited to, the risk that (1) we have not commenced the commercial production of recycled black mass using our LFP recycling process or otherwise; (2) there can be no assurance we will be able to realize the expected benefits of our LFP recycling process once we commence commercial recycling; (3) the risk we may not be able to successfully acquire the funding necessary to develop our Sierra ARC facility required to commence commercial recycling; (4) even if we are to able acquire the necessary funding, the risk we may not be able to successfully develop the Sierra ARC

facility or realize the expected benefits from such facility; (5) the risk that we may not be able to acquire the funding necessary to maintain our current level of operations; and (6) those risks disclosed in the section "Risk Factors" included in our Annual Report on Form 10-K filed on March 31, 2025. Aqua Metals cautions readers not to place undue reliance on any forward-looking statements. The Company does not undertake and specifically disclaims any obligation to update or revise such statements to reflect on new circumstances or unanticipated events as they occur, except as required by law.

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