

Aqua Metals Nears Completion of Planned Plant Upgrades; Will Begin Scaling in Q1 2019

Phase One of Capital Program on Track to Achieve Targeted Electrolyte Management

MCCARRAN, Nev., Dec. 18, 2018 (GLOBE NEWSWIRE) -- Aqua Metals, Inc. (NASDAQ: AQMS), which is reinventing lead recycling with its AquaRefining™ technology, today announced that it is nearing completion of Phase One of its two-phase capital improvement program, as well as implementing its plan to begin processing a portion of hard metallic lead into lead ingots. As a result, the Company expects to reach neutral to positive contribution margin in the first quarter of 2019, which should allow it to begin ramping AquaRefining operations.

"I'd like to congratulate our entire team on the great progress we've made in the fourth quarter. This includes achieving official lead vendor approval from Johnson Controls, extended module uptimes of five consecutive days and significant steps towards achieving positive contribution margin at the world's first AquaRefinery," said Steve Cotton, Aqua Metals' President. "As a result of these improvements, we feel confident in commencing a rational, measured ramp-up of operations."

Electrolyte recovery is critical to achieving positive contribution margin and Aqua Metals is now conserving 67% of its target for electrolyte recovery. The Company expects to conserve 75% of its target for electrolyte recovery when it completes Phase One of the program early in the first quarter and conserve 100% when it completes Phase Two. The Company is already running a successful pilot program for the Phase Two solution of its capital improvement program, which, along with conserving additional electrolyte, should generate higher lead yields for the AquaRefining process, further improving contribution margin. Aqua Metals plans to install and start Phase Two operations by the end of Q2 2019.

Aqua Metals has also installed an additional kettle to process the hard lead from the batteries it breaks and plans to begin those operations in early January. Aqua Metals expects the new kettle to result in up to a 25% increase in finished lead ingots, which it can sell for more than it is currently receiving for un-ingoted hard metallic lead.

"In order to conserve capital, we have limited AquaRefining operations to one or two modules at a time. As neutral to positive contribution margin is reached, anticipated before the end of the first quarter, we plan to bring our initial four modules up to full production. As our contribution margins steadily improve, we plan to bring additional AquaRefining production online, four modules at a time. This should allow us to synchronize our front-end and other plant operations to our AquaRefining operations as we produce more lead. We

look forward to updating the market on our roll-out schedule as we achieve these key milestones," concluded Cotton.

About Aqua Metals

Aqua Metals, Inc. (NASDAQ:AQMS) is reinventing lead recycling with its patented AquaRefining™ technology. Unlike smelting, AquaRefining is a room temperature, water-based process that emits less pollution. The modular systems are intended to allow the Company to vastly reduce environmental impact and scale lead acid recycling production capacity by licensing the AquaRefining technology to partners. This would meet growing demand for lead to power new applications including stop/start automobile batteries which complement the vehicle's main battery, Internet data centers, alternative energy applications including solar, wind, and grid scale storage. Aqua Metals is based in McCarran, NV, and has built its first recycling facility in Nevada's Tahoe Reno Industrial Complex. To learn more, please visit www.aquametals.com.

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" and variations of such words or similar expressions that predict or indicate future events or trends, or that do not relate to historical matters. The forward looking statements in this release include the Company's expectations for reaching neutral to positive contribution margin for its AquaRefining operations, strength and efficacy of Aqua Metals' portfolio of patent applications and issued patents, the lead acid battery recycling industry, the future of lead acid battery recycling via traditional smelters, the Company's development of its commercial lead acid battery recycling facilities and the quality and efficiency of the Company's proposed lead acid battery recycling operations. Those forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause actual results to differ materially. Among those factors are: (1) the risk that the Company may not be able to achieve neutral to positive contribution margin for its AquaRefining operations, (2) the risk that the Company may not be able to produce and market AquaRefined lead on a commercial basis or, if the Company achieves commercial operations, that such operations will be profitable, (3) the fact that the Company only recently commenced production and has not generated any significant revenue to date, thus subjecting the Company to all of the risks inherent in a prerevenue start-up; (4) the risk no further patents will be issued on the Company's patent applications or any other application that it may file in the future and that those patents issued to date and any patents issued in the future will be sufficiently broad to adequately protect the Company's technology, (5) the risk that the Company's initial patents and any other patents that may be issued to it may be challenged, invalidated, or circumvented, (6) risks related to Aqua Metals' ability to raise sufficient capital, as and when needed, to develop and operate its recycling facilities and fund continuing losses from operations as the Company endeavors to achieve profitability; (7) changes in the federal, state and foreign laws regulating the recycling of lead acid batteries; (8) the Company's ability to protect its proprietary technology, trade secrets and know-how and (9) those other risks disclosed in the section "Risk Factors" included in the Company's Quarterly Report on Form 10-Q filed on November 7, 2018. Agua 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 new circumstances or

unanticipated events as they occur, except as required by law.

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Source: Aqua Metals