

## Aqua Metals Begins Production of Ingots; Updates Progress on Module Utilization and Capital Projects

ALAMEDA, Calif., Oct. 12, 2018 (GLOBE NEWSWIRE) -- Aqua Metals, Inc. (NASDAQ: AQMS) ("Aqua Metals" or the "Company"), which is reinventing lead recycling with its AquaRefining™ technology, today announced that it has added ingots as part of its finished product offerings and has made significant progress towards steady state module utilization.



Ingoting process operating at steady state at Aqua Metals plant in McCarran, Nevada.



Initial cast ingots stored in the off-take area of Aqua Metals plant in McCarran, Nevada.



Close up of the microstructure of the AquaRefined ingoted lead. Note the crystal structure highlighting the purity of lead.

"We are now complementing our initial finished product offering of large lead blocks with smaller lead ingots, the preferred lead format for our battery manufacturer customers," commented Steve Cotton, President of Aqua Metals. "We have overcome the technical hurdles and are now making lead ingots at steady state. This will allow us to ship our ultrapure AquaRefined lead directly to battery manufacturers for production and also allow them to test our AquaRefined lead for improved battery performance and life."

To view a video of the ingoting line in process, please click here:

## https://youtu.be/A1nXVNV5ULc

Cotton added, "We have also made considerable progress increasing the daily utilization and hourly production rate of or AquaRefining process to near steady state levels while delivering what we believe to be the purest lead produced in America. We have achieved production levels of 100 kg per hour on individual modules operating 20+ hours per day, resulting in daily production of 2+ metric tons of AquaRefined lead per day on those individual modules.

"We are currently operating one module at a time until we can recapture and reuse our proprietary electrolyte," Cotton continued. "Our engineers have designed the process and we have procured the equipment that we believe will allow us to recapture this electrolyte, which will greatly improve our contribution margin per metric ton of lead. We are deploying these improvements in two phases. We estimate Phase One will take us up to 75% towards our target for electrolyte recapture and Phase Two will complete the remaining 25%. We have completed testing of Phase One of the system and have begun installing the equipment. We have also begun testing Phase Two, and are very pleased with the initial results."

Cotton concluded, "We are still tracking towards our goal of completing Phase One of our electrolyte management upgrades by the end of the year which will position us to roll out additional modules. This is an aggressive timeline, but we are laser-focused in attempting to meet it. Finally, we have additional initiatives underway to improve margins on product sales and feedstock. We will provide additional detail on the progress of all of these projects in the fourth quarter of 2018."

Photos accompanying this announcement are available at

https://www.globenewswire.com/NewsRoom/AttachmentNg/6131b35d-0f93-4696-b6ea-0fa325cb8714

https://www.globenewswire.com/NewsRoom/AttachmentNg/80306c49-a5a2-4de6-8d59-36b72589849b

https://www.globenewswire.com/NewsRoom/AttachmentNg/8ef10b79-9c6e-43de-9ac5-ac0c1a7336c4

## **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 significantly less emissions. 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 Alameda, California, and has built its first recycling facility in Nevada's Tahoe Reno Industrial Complex. To learn more, please visit <a href="https://www.aquametals.com">www.aquametals.com</a>.

## Safe Harbor

This press release contains forward-looking statements concerning Aqua 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 strength and efficacy of Agua 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 produce and market AguaRefined lead on a commercial basis or, if the Company achieves commercial operations, that such operations will be profitable, (2) the fact that the Company only recently commenced production of AguaRefined lead and has not generated significant revenue from the sale of AguaRefined lead to date, thus subjecting the Company to all of the risks inherent in an early-stage company; (3) 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, (4) the risk that the Company's initial patents and any other patents that may be issued to it may be challenged, invalidated, or circumvented, (5) risks related to Agua 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; (6) changes in the federal, state and foreign laws regulating the recycling of lead acid batteries; (7) the Company's ability to protect its proprietary technology, trade secrets and know-how and (8) those other risks disclosed in the section "Risk Factors" included in the Company's Quarterly Report on Form 10-Q filed on August 8, 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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