

This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, but the information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 16, 2019

**PROSPECTUS SUPPLEMENT
(to the Prospectus dated September 26, 2016)**



Shares of Common Stock

We are selling _____ shares of our common stock. Our common stock is listed on the NASDAQ Capital Market under the symbol "AQMS." On January 15, 2019, the last reported sales price of our common stock on the NASDAQ Capital Market was \$2.28 per share.

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully review and consider all of the information set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including the risks and uncertainties described under "Risk Factors" beginning on page S-6 of this prospectus supplement and the risk factors incorporated by reference into this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discount (1)	\$	\$
Proceeds to Us (Before Expenses)	\$	\$

(1) See "Underwriting" for additional information about the underwriter compensation arrangements.

We have granted the underwriters an option to purchase up to an additional _____ shares of common stock from us at the public offering price less the underwriting discounts and commissions, and on the same terms and conditions as set forth above, for 45 days after the date of this prospectus supplement. If the underwriters exercise the option in full, the total public offering price will be \$ _____, the total underwriting discounts and commissions will be \$ _____, and the total proceeds, before expenses, to us will be \$ _____.

The underwriters expect to deliver the shares against payment through the facilities of the Depository Trust Company on or about January _____, 2019.

Sole Book-running Manager

National Securities Corporation

The date of this prospectus supplement is January _____, 2019.

TABLE OF CONTENTS

Prospectus Supplement

	<u>Page</u>
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-2
RISK FACTORS	S-6
FORWARD-LOOKING STATEMENTS	S-17
USE OF PROCEEDS	S-18
DILUTION	S-19
UNDERWRITING	S-20
LEGAL MATTERS	S-23
EXPERTS	S-23
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-24
WHERE YOU CAN FIND MORE INFORMATION	S-25

Base Prospectus

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
ABOUT AQUA METALS, INC.	1
RISK FACTORS	2
NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
THE SECURITIES WE MAY OFFER	3
DESCRIPTION OF DEBT SECURITIES	3
DESCRIPTION OF WARRANTS	11
DESCRIPTION OF UNITS	12
PLAN OF DISTRIBUTION	13
LEGAL MATTERS	15
EXPERTS	15
WHERE YOU CAN FIND MORE INFORMATION	15
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	15

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”) utilizing a “shelf” registration process. Each time we conduct an offering to sell securities under the accompanying base prospectus we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the price, the amount of securities being offered and the plan of distribution. The shelf registration statement was initially filed with the SEC on September 2, 2016, and was declared effective by the SEC on September 26, 2016. This prospectus supplement describes the specific details regarding this offering and may add, update or change information contained in the accompanying base prospectus. The accompanying base prospectus provides general information about us and our securities, some of which, such as the section entitled “Plan of Distribution,” may not apply to this offering. This prospectus supplement and the accompanying base prospectus are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. We are not making offers to sell or solicitations to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

If information in this prospectus supplement is inconsistent with the accompanying base prospectus or the information incorporated by reference with an earlier date, you should rely on this prospectus supplement. This prospectus supplement, together with the base prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying base prospectus and any free writing prospectus we have authorized for use in connection with this offering include all material information relating to this offering. We have not, and the underwriters have not, authorized anyone to provide you with different or additional information and you must not rely on any unauthorized information or representations. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus and any free writing prospectus we have authorized for use in connection with this offering is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates. **You should carefully read this prospectus supplement, the accompanying base prospectus and the information and documents incorporated herein by reference herein and therein, as well as any free writing prospectus we have authorized for use in connection with this offering, before making an investment decision. See “Incorporation of Certain Documents by Reference” and “Where You Can Find More Information” in this prospectus supplement and in the accompanying base prospectus.**

This prospectus supplement and the accompanying base prospectus contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the full text of the actual documents, some of which have been filed or will be filed and incorporated by reference herein. See “Where You Can Find More Information” in this prospectus supplement. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying base prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus supplement and the accompanying base prospectus contain and incorporate by reference certain market data and industry statistics and forecasts that are based on Company-sponsored studies, independent industry publications and other publicly available information. Although we believe these sources are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under “Risk Factors” in this prospectus supplement and the accompanying base prospectus and under similar headings in the documents incorporated by reference herein and therein. Accordingly, investors should not place undue reliance on this information.

Unless otherwise stated or the context requires otherwise, all references in this prospectus supplement to the “Company,” “we,” “us,” “our” and “Aqua Metals” refer to Aqua Metals, Inc., a Delaware corporation, and its wholly-owned subsidiaries. We own the trademark applications for our corporate name “Aqua Metals” and the terms “AquaRefining”, “AquaRefinery” and “AquaRefine”. All other trademarks, trade names and service marks included or incorporated by reference into this prospectus supplement, the accompanying base prospectus and any applicable free writing prospectus are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This prospectus summary highlights information contained elsewhere in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement and the accompanying base prospectus carefully, including the section entitled “Risk Factors” beginning on page S-6 and our consolidated financial statements and the related notes and the other information incorporated by reference into this prospectus supplement and the accompanying base prospectus, before making an investment decision.

Our Company

We are engaged in the business of recycling lead through a novel, proprietary process that we developed and named “AquaRefining”. Lead is a globally traded commodity with a worldwide market value in excess of \$20 billion. Lead acid batteries, or LABs, are the primary consumer use of all lead produced in the world. Because the chemical and metallurgical properties of lead allow it to be recycled and reused indefinitely, LABs are also the dominant feed source for lead production across the world. As such, LABs are almost 100% recycled for purposes of capturing the lead contained therein for re-use. We believe that our proprietary AquaRefining process will provide for the recycling of LABs and the production of a high purity lead with fewer environmental and regulatory issues than is possible with conventional methods of lead production.

In recent years, recycled lead has become increasingly important to LAB production. Recycled lead surpassed mined lead in the 1990s and now represents more than 60% of the lead content in new LABs. Whether it is produced from lead ore or recycled LABs, lead has historically been produced by smelting. Smelting is a high-temperature, metallurgical/chemical reduction, energy intensive and often a highly polluting process. As a consequence of the environmental and health issues, lead smelting has become increasingly regulated in many countries. In the U.S., regulatory non-compliance has forced the closure of large lead smelters in Vernon, California, Frisco, Texas and Herculaneum, Missouri over the last several years. In response to increasing environmental regulation over the past three decades, there has been an expansion of LAB smelting capacity in Mexico and other less regulated countries. The resulting transportation of used LABs from where they originate in the U.S. to smelters in Mexico, South Korea, the Philippines and elsewhere is an increasingly significant logistical and global environmental cost.

LABs require two forms of lead. High purity lead is required for the active material and lead alloy is required for the lead grids which support the active material. Conventionally, lead for use as the active material was produced from lead ore which is known as “primary lead”. The Herculaneum smelter was the last US based producer of primary lead. This closure is part of a worldwide trend in which production of primary lead is failing to keep up with demand as primary lead ore bodies become worked out and lead ore (galena or lead sulfide) is supplemented with lower purity lead concentrates produced as a byproduct of other metal production (typically zinc and copper).

Conventional lead recycling produces a grade of lead of moderate purity, known as “secondary lead”. Secondary lead can be further processed to reach a level of purity suitable for use as the active material in a LAB or alloyed before it can be used as grid material in a LAB. The additional processing requires additional cost and brings further inefficiency, loss of material and the potential for further environmental impact. As applications for LABs develop and expand, beyond their use simply as engine starter batteries, factors such as energy storage capacity, depth of discharge and cycle life become increasingly important. The more advanced LABs typically require higher purity lead. In turn, this has started to increase worldwide demand for lead previously supplied by primary lead.

AquaRefining uses a novel, proprietary and patented process which first produces a water-based and bio-degradable lead rich electrolyte, from which lead is electro-plated. The combination of the electrolyte production and the electro-plating processes produce lead of a purity which is equivalent to primary lead (i.e., higher than 99.99% purity). As such, we believe that AquaRefining reduces environmental plant emissions, health concerns and permitting needs compared with lead smelting. We believe that the combined advantages offered by AquaRefining represent a potential step change in lead recycling technology that includes improved product quality, advantages in footprint and logistics as well as reduced environmental impact.

The modular nature of AquaRefining makes it possible to add AquaRefining to existing battery recycling operations to expand production capacity or to reduce smelting processes. Our plan is to pursue two complementary business streams. The first is to supply AquaRefining and supporting equipment to third parties to supplement or replace smelting in their battery recycling operations. We intend to pursue this at least initially through our relationship with Johnson Controls Inc., with which we have entered exploratory discussions centered on the addition of AquaRefining to one of its existing battery recycling operations, and intend to pursue similar arrangements with other companies operating recycling operations. The second is to expand our own lead recycling operations at the Tahoe Regional Industrial Center, McCarran, Nevada, or TRIC, subject to our receipt of additional capital following this offering.

We have completed the development of our first LAB recycling facility at TRIC and commenced production of battery breaking and limited operations during the first quarter of 2017. The TRIC facility currently produces recycled lead, consisting of lead compounds, ingoted hard lead and ingoted AquaRefined lead, as well as plastic. We commenced the shipment of products for sale, consisting of lead compounds and plastics, in April 2017 and in April 2018 commenced the limited production of lead bullion, including AquaRefined lead. In July 2018, we commenced the sale of pure AquaRefined lead in the form of two tonne blocks, and in October 2018 we commenced the sale of AquaRefined lead in the form of battery manufacturing-ready ingots. In November 2018, we received official vendor certification from Johnson Controls for our AquaRefined lead, and in December 2018 we commenced shipments directly to Johnson Controls-owned and partner battery manufacturing facilities.

As of December 2017, we had installed 16 AquaRefining modules at TRIC. As of the date of this prospectus supplement, we have operated the first four of the 16 modules and have made continuous improvements which have led to individual modules running in a steady state producing 100Kg/hour plus for several days at a time which meets or exceeds the specifications we have set for the technology. As we bring the initial four modules into commercial operation, we expect to continue to adjust the modules to further enhance operation. Although we staffed the facility and ran one or two AquaRefining Modules on a 24/7 basis from October to December of 2018, we are currently running one or two of modules 24-hours a day, four days a week to allow safe times for some of the key work to be completed for our contribution margin improvement projects. Subject to the completion of key work, we intend to reinstate 24-hour, seven days a week, continuous operations during the first quarter of 2019 and scale to running all four of the initial four modules before bringing the next four modules on line. Our goal is to operate all 16 modules on a 24/7 continuous basis by the end of 2019. In addition, we believe this operational strategy will allow us to maximize lead production, while enabling the remaining components of the plant to be synchronized in support of increased AquaRefining. Once we are satisfied with the operation of the first four modules, additional modules will be brought into production. This process will be repeated until full production is reached with all 16 modules. However, due to the delays and unforeseen issues in the completion of the AquaRefining production line we have experienced to date, there can be no assurance that we will not encounter additional delays and issues.

As of the date of this prospectus supplement, we have secured one US patent, 13 international patents and one allowance. In addition to the US patent, we have international patents/allowances in the European Union, Korea, Japan, China, Australia, Canada, African Intellectual Property Organization, Mexico, South Africa and the Ukraine. We also have 90 patent applications pending in the United States and numerous corresponding patent applications pending in 20 additional jurisdictions across seven distinct patent applications relating to certain elements of the technology underlying our AquaRefining process and related apparatus and chemical formulations.

Our plan of operations for the 12-month period following the date of this prospectus supplement, and upon the satisfactory operation of the first four modules, is to complete the commercial roll-out of all 16 AquaRefining modules installed at TRIC and to ramp up the production of AquaRefined lead. We may also install an additional 16 AquaRefining modules at TRIC, subject to the receipt of additional capital following this offering and any design improvements that are recommended based on the operation of the first 16 modules. Subject to our ability to ramp up our AquaRefining operations to a commercial scale, our 12-month plan of operations also includes the completion of our joint development agreement with Johnson Controls, including our proposal to provide planning, engineering, technical assistance, equipment and other services in support of the addition of an AquaRefining facility to a battery recycling facility owned by Johnson Controls. This proposed work is expected to produce a blueprint for further additions of AquaRefining facilities under a proposed definitive development agreement with Johnson Controls pursuant to which we will collaborate with Johnson Controls for the conversion of Johnson Controls' and certain strategic partners' of Johnson Controls existing lead smelters to a lead recycling process utilizing our proprietary AquaRefining technology and equipment, know-how and services. Finally, our 12-month plan of operations includes our continued pursuit of the licensing of our recycling technology and equipment to third parties. Additional funding will be required to expand our production capacity at TRIC and to expand into the business of supplying equipment and services to third parties. There can be no assurance that we will be able to acquire the necessary funding on commercially reasonable terms or at all. There can also be no assurance we will be able to conclude the proposed development agreement with Johnson Controls.

Recent Developments

Changes in Management

On January 7, 2019, our board of directors, acting upon the recommendation of the board's CEO succession committee and nominating and corporate governance committee, appointed Stephen Cotton to serve as our chief executive officer, in addition to serving in his current position as our president. Mr. Cotton was also appointed to serve as a member of our board of directors. Mr. Cotton's appointment to serve as chief executive officer and to the board was effective as of January 7, 2019. Stephen Cotton has served as our president since May 2, 2018. Mr. Cotton also served as our chief commercial officer from January 2015 to June 9, 2017.

On December 3, 2018, Selwyn Mould, our chief operating officer, resigned pursuant to mutual agreement with us.

On November 4, 2018, our board of directors appointed Judd Merrill to serve as our chief financial officer. Mr. Merrill assumed the duties as chief financial officer effective as of November 8, 2018.

Key-Man Payments

In connection with their equity investments in our Company, we entered into separate Investor Rights Agreement with Johnson Controls, Inc. and Interstate Battery Systems International, Inc., pursuant to which we agreed to compensate Johnson Controls and Interstate Battery should either Stephen Clarke, our former chief executive officer, or Selwyn Mould, our former chief operating officer, no longer hold such positions or no longer devote substantially all of their business time and attention to our Company (such an event referred to as a "key-man event"). We agreed to pay Interstate Battery \$2 million, per occurrence, if either officer was subject to a key-man event during the two years following May 18, 2016. We also agreed to pay Interstate Battery \$2 million if either or both officers are subject to a key-man event during the third year following May 18, 2016. In addition, we agreed to pay Johnson Controls \$1 million per occurrence, if either officer is subject to a key-man event during the 18 months following February 7, 2017 and agreed to pay Johnson Controls \$1 million if either or both key-man events occur after 18 months and prior to 30 months following February 7, 2017. Pursuant to their Investor Rights Agreements with us, if Johnson Controls and Interstate Battery, in their sole and absolute discretion, agree with us on mutually acceptable replacements for Messrs. Clarke and/or Mould, as the case may be, the key man penalties would be waived by Johnson Controls or Interstate Battery, as the case may be.

In connection with the April 2018 resignation of Mr. Clarke, we entered into an amendment to the Interstate Battery Investor Rights Agreement pursuant to which Interstate Battery agreed to waive all payments under the key-man provisions of its Investor Rights Agreement with respect to the resignation of Mr. Clarke. In addition, Interstate Battery agreed that we, at our option, can elect to eliminate the key-man event and all related key-man payments associated with Mr. Mould by (i) paying Interstate Battery a one-time fee of \$0.5 million, payable by us in cash and (ii) agreeing to pay Interstate Battery \$2 million, payable at our election in cash or shares of our common stock, should our current president, Stephen Cotton, no longer serve as our president during the period ending May 18, 2019. We intend to make that election and pay the \$0.5 million to Interstate Battery in the first quarter of 2019.

Following the December 3, 2018 resignation of Mr. Mould, Johnson Controls delivered to us its claim for payment of the key-man penalties for Messrs. Clarke and Mould in the total amount of \$2 million. We believe, however, that Johnson Controls' demand was premature as it had not considered the adequacy of the replacements for Mr. Clarke or Mr. Mould and that any such claim can be asserted only after their replacements have been appointed and considered in good faith. We intend to dispute Johnson Controls' claims for the key-man payments, however there can be no assurance we will be successful in doing so. If we are unsuccessful in doing so, we may be obligated to pay Johnson Controls up to \$2 million payable in cash or, at our option, shares of our common stock having a market value of \$2 million.

Our principal executive offices are located at 2500 Peru Drive, McCarran, Nevada 89434, and our telephone number is (510) 479-7635. Our website is www.aquametals.com. Information contained in, or accessible through, our website does not constitute part of this prospectus supplement and inclusions of our website address in this prospectus supplement are inactive textual references only.

The Offering

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying base prospectus. For a more complete description of the terms of our common stock, see "Description of Our Capital Stock" in the accompanying base prospectus.

Common stock offered by us	shares of our common stock (shares if the underwriters exercise their over-allotment option in full).
Offering price	\$ per share of common stock.
Common stock to be outstanding after this offering	shares (shares if the underwriters exercise their over-allotment option in full).
Use of proceeds	We estimate that our net proceeds from this offering will be approximately \$ (or approximately \$ if the underwriters exercise their over-allotment option in full), after deducting the underwriting discount and the estimated offering expenses payable by us. We expect to use the net proceeds from this offering for working capital, which could include capital expenditures related to addressing operational efficiencies and the expansion of production activities at TRIC, and general corporate purposes. See "Use of Proceeds" on page S-18.

Risk factors

Investing in our common stock involves a high degree of risk. These risks include all of the risks typically relating to an early stage company, including our ability to develop and commercialize novel and unproven technologies, bring modules online, ramp up production and profitably operate our AquaRefining process on a commercial scale, securities class action lawsuits and shareholder derivative lawsuits and our ability to conclude a development agreement with Johnson Controls or other strategic partners. They also include our need to raise additional funds and our ability to comply with our debt service covenant with Green Bank. See “Risk Factors” beginning on page S-6 and the other information included or incorporated by reference in this prospectus supplement and the accompanying base prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.

NASDAQ Capital Market symbol “AQMS”

The number of shares of our common stock expected to be outstanding after this offering is based on 39,140,381 shares of common stock outstanding as of the date of this prospectus supplement, and excludes the following:

- 1,980,123 shares of common stock issuable upon exercise of options outstanding as of the date of this prospectus supplement, which have a weighted average exercise price of \$4.17 per share;
- 343,375 shares of common stock issuable upon vesting of restricted stock units as of the date of this prospectus supplement;
- 60,894 shares of common stock reserved for issuance and available for future grant under our 2014 Stock Incentive Plan as of the date of this prospectus supplement;
- 245,562 shares of common stock reserved for issuance under our Officer and Director Share Purchase Plan as of the date of this prospectus supplement;
- 2,340,828 shares of common stock issuable upon exercise of warrants outstanding as of the date of this prospectus supplement, which have a weighted average exercise price of \$8.45 per share; and
- 702,247 shares of common stock issuable upon conversion of \$5 million of outstanding principal under a convertible note issued to Interstate Battery Systems International, Inc., which is convertible into shares of our common stock at a conversion price of \$7.12 per share.

Unless otherwise stated or the context requires otherwise, all information in this prospectus supplement assumes that the option to purchase up to additional shares of common stock that we have granted to the underwriters is not exercised.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should read and consider carefully the following risk factors as well as all other information contained and incorporated by reference in this prospectus supplement and the accompanying base prospectus, including our consolidated financial statements and the related notes. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial, which could also impair our business and financial position. If any of the events described below were to occur, our financial condition, our ability to access capital resources, our results of operations and/or our future growth prospects could be materially and adversely affected and the market price of our common stock could decline. As a result, you could lose some or all of any investment you may make in our common stock.

Risks Relating to Our Business

Since we have a limited operating history and have only recently commenced revenue producing operations, it is difficult for potential investors to evaluate our business. We formed our corporation in June 2014 and only commenced revenue producing operations in the first quarter of 2017. From inception through September 30, 2018, we generated a total of \$5.5 million of revenue, which was derived primarily from the sale of lead compounds and plastics and, to a lesser extent, the sale of lead bullion, including AquaRefined lead. To date, our operations have consisted of the development and testing of our AquaRefining process, the construction of our initial LAB recycling facility at TRIC, the continuing development of our LAB recycling operations at TRIC and limited revenue producing operations as we bring those LAB recycling operations online. Our limited operating history makes it difficult for potential investors to evaluate our technology or prospective operations. As an early stage company, we are subject to all the risks inherent in the initial organization, financing, expenditures, complications and delays in a new business, including, without limitation:

- the timing and success of our plan of commercialization and the fact that we continue to experience delays in rolling out our LAB recycling operations at TRIC;
- our ability to bring modules online and ramp up production on a commercial scale and the fact that we continue to experience performance and production issues that prevent us from running our initial modules on a continuous basis;
- our ability to profitably operate our AquaRefining process on a commercial scale;
- our ability to realize the expected benefits of our strategic partnership with Johnson Controls;
- our ability to procure LABs in sufficient quantities at competitive prices; and
- our ability to receive proper certification from and meet the requirements of our customers regarding the purity of our AquaRefined lead.

Investors should evaluate an investment in us in light of the uncertainties encountered by developing companies in a competitive environment. There can be no assurance that our efforts will be successful or that we will ultimately be able to attain profitability.

Our business is dependent upon on our successful implementation of novel and unproven technologies and processes and there can be no assurance that we will be able to implement such technologies and processes in a manner that supports the successful commercial roll-out of our business model. While much of the technology and processes involved in our lead recycling operations are widely used and proven, the AquaRefining component of our lead recycling operations is largely novel and unproven. While we have shown that our proprietary technology can produce AquaRefined lead on a small scale, we have only recently completed, and put into limited operation, the processes that we believe will support the production of AquaRefined lead on a commercial scale. Further, as we complete our AquaRefining production line, we continue to encounter unforeseen complications that have delayed the installation and commissioning of our AquaRefining modules and the integration of our AquaRefining process with the traditional lead recycling operations. For example, we most recently had to develop special processes and equipment to deal with an unexpected development in the form of “sticky lead,” whereby the AquaRefined lead produced by our electrolyzers stuck to the AquaRefining modules’ exit chute and failed to exit without manual intervention. As of the date of this prospectus supplement, we have substantially completed the retrofit of all 16 modules for this particular issue and have begun to bring the initial four modules into commercial operation, however we continue to experience performance and production issues that prevent us from running the initial four modules on a continuous basis. There can be no assurance that we will be able to overcome these production and performance issues in a timely manner or that we will not encounter additional unforeseen complications that will cause further delays in our planned commercial roll-out of all 16 AquaRefining modules installed at TRIC and to ramp up the production of AquaRefined lead.

We will need additional financing to execute our business plan and fund operations, which additional financing may not be available on reasonable terms or at all. As of September 30, 2018, we had total cash of \$28.8 million and working capital of \$23.6 million. As of the date of this prospectus supplement, and after giving effect to the proceeds of this offering, we believe that we have working capital sufficient to fund the commercial roll-out of the initial 16 AquaRefining modules at TRIC. However, we will require additional capital in order to increase production of AquaRefined lead at TRIC beyond that planned for 16 modules, to work with Johnson Controls on equipment integration and licensing to third parties, to fund working capital needs related to the ramp-up of our operations and to fund our continued losses from operations until such time as we are able to achieve positive cash flow from operations. There can be no assurance that we will be able to acquire the necessary funding on commercially reasonable terms or at all. There can also be no assurance we will be able to conclude the proposed development agreement with Johnson Controls. We intend to seek additional funds through various financing sources, including the sale of our equity and debt securities, licensing fees for our technology, joint ventures with capital partners and/or project financing of our recycling facilities. However, there can be no assurance that such funds will be available on commercially reasonable terms, if at all. If such funding is not available on satisfactory terms, we may be unable to further pursue our business plan and we may be unable to continue operations, in which case you may lose your entire investment.

We are subject to restrictive debt covenants that may limit our ability to run our business, finance our capital needs and pursue business opportunities and activities. As of December 31, 2018, we were indebted to Green Bank for approximately \$9.5 million and Interstate Battery for approximately \$6.7 million, all of which is secured by liens on substantially all of our assets. The credit agreements governing such indebtedness contain covenants that limit our ability to take certain actions. These covenants could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in our interest. If we breach any of these covenants, the debt holder could declare a default under the credit agreement, in which case all of the indebtedness may then become immediately due and payable. In addition, any default under one credit agreement could lead to an acceleration of debt under the other credit agreement pursuant to cross-acceleration or cross-default provisions. If the debt under either credit agreement is accelerated, we may not have, or be able to obtain, sufficient funds to make these accelerated payments. In addition, since all of the indebtedness to Green Bank and Interstate Battery is secured by substantially all of our assets, a default under either credit facility could enable the debtholder to foreclose on its security interest and attempt to seize our assets. The affirmative and negative debt covenants could materially adversely impact our ability to operate and finance our business. In addition, our default under any of these covenants could subject us to accelerated debt payments or foreclosure proceedings that could threaten our ability to continue as a going concern.

Our loan to Interstate Battery is due in May 2019 and the repayment of that loan may have a material adverse impact on our working capital. As noted above, as of December 31, 2018, we were indebted to Interstate Battery for approximately \$6.7 million, all of which is secured by liens on substantially all of our assets. The Interstate Battery loan is due and payable in full on May 24, 2019. Although we currently have the cash on-hand with which to repay the loan in full, doing so may have a material adverse impact on our working capital. We are currently seeking to refinance the Interstate Battery loan, however there can be no assurance we will be able to do so on terms that are commercially reasonable, if at all. Our inability to refinance the Interstate Battery loan will require repayment of the loan from cash on-hand, which may impair our ability to pursue the expansion of our operations and other potential projects. There can be no assurance that we will be able to refinance the Interstate Battery loan. If we are unable to do so, our working capital may be materially impaired. If we are able to refinance the loan, the terms of any debt-based refinancing may involve restrictions limiting our operating flexibility and the terms of any equity-based refinancing will result in equity dilution to our stockholders.

In the event of the acceleration of either the Interstate Battery or Green Bank loans, we will need additional financing to satisfy our obligations under the loans, which additional financing may not be available on reasonable terms or at all. As noted above, as of December 31, 2018, we were indebted to Green Bank for approximately \$9.5 million and Interstate Battery for approximately \$6.7 million. The credit agreements governing such indebtedness contain various affirmative and negative covenants and if we breach any of these covenants, the debt holder could declare a default under the credit agreement, in which case all of the indebtedness may then become immediately due and payable. In addition, any default under one credit agreement could lead to an acceleration of debt under the other credit agreement pursuant to cross-acceleration or cross-default provisions. If the debt under either credit agreement is accelerated, we may not have sufficient funds to make the accelerated payments, in which case we would be required to seek additional funds through various financing sources, most likely through the sale of our equity or debt securities. However, there can be no assurance that such funds will be available on commercially reasonable terms, if at all. Further, any sale of our equity or equity-linked securities will result in additional dilution to our stockholders.

Our outstanding debt may make it difficult for us to obtain additional financing using our future operating cash flow. We currently have a substantial amount of indebtedness, including approximately \$9.5 million owed to Green Bank and approximately \$6.7 million owed to Interstate Battery as of the date of this prospectus supplement. Such indebtedness could limit our ability to borrow additional funds to fund operations or expansion or increase the cost of any such borrowing, or both. Our inability to conduct additional debt financing could:

- limit our flexibility in developing our business operations and planning for, or reacting to, changes in our business;
- increase our vulnerability to, and reduce our flexibility to respond to, general adverse economic and industry conditions; and
- place us at a competitive disadvantage as compared to our competitors that are not as highly leveraged.

Any of these or other consequences or events could have a material adverse effect on our ability to finance our business and our operations.

We may be required to pay up to \$2.5 million of key-man payments as the result of the resignations of our chief executive officer and chief operating officer. On April 19, 2018, Stephen Clarke resigned as our president and chief executive officer and on December 3, 2018 Selwyn Mould resigned as our chief operating officer. As a result of their resignations, we will be obligated to make key-man payments of \$500,000 in cash to Interstate Battery and we may also be obligated to pay up to \$2 million to Johnson Controls, payable, at our option, in cash or shares of our common stock, unless Johnson Controls approves the successor to Mr. Clarke and Mr. Mould. Following the December 3, 2018 resignation of Mr. Mould, Johnson Controls delivered to us its claim for payment of the key-man penalties for Messrs. Clarke and Mould in the total amount of \$2 million. We believe, however, that Johnson Controls' demand was premature as it had not considered the adequacy of the replacements for Mr. Clarke or Mr. Mould and that any such claim can be asserted only after their replacements have been appointed and considered in good faith. We intend to dispute Johnson Controls' claims for the key-man payments, however there can be no assurance we will be successful in doing so. If we are unsuccessful in doing so, we may be obligated to pay Johnson Controls up to \$2 million payable in cash or, at our option, shares of our common stock having a market value of \$2 million.

Our business model is new and has not been proven by us or anyone else. We are engaged in the business of producing recycled lead through a novel and unproven technology. While the production of recycled lead is an established business, to date all recycled lead has been produced by way of traditional smelting processes. To our knowledge, no one has successfully produced recycled lead in commercial quantities other than by way of smelting. In addition, our lead recycling production line at TRIC is the first-of-its-kind and neither we nor anyone else has ever successfully built a production line that commercially recycles LABs without smelting. While we have commenced limited lead recycling operations at our TRIC facility, through the date of this prospectus supplement all revenues have been derived primarily from the sale of lead compounds and plastics and, to a lesser extent, the sale of lead bullion, including AquaRefined lead, which we began to produce in April 2018. In addition to the general risks associated with a novel and unproven technology, our business model is subject to a number of related risks, including:

- our ability to acquire sufficient quantities of used LABs at competitive prices;
- our ability to produce AquaRefined lead that is priced competitively with lead produced by traditional smelting processes;
- our ability to produce AquaRefined lead on a commercial scale and at an adequate gross profit; and
- our ability to sell our AquaRefined lead at prices and in quantities that provide an adequate net profit from operations.

Further, there can be no assurance that we will be able to produce AquaRefined lead in commercial quantities at a cost of production that will provide us with an adequate profit margin. The uniqueness of our AquaRefining process and our production line at TRIC presents potential risks associated with the development of a business model that is untried and unproven. As of the date of this prospectus supplement, we have begun to bring our AquaRefining modules into commercial operation, however we continue to experience performance and production issues. There can be no assurance that we will be able to overcome these production and performance issues in a timely manner or that we will not encounter additional unforeseen complications that will cause further delays in our planned commercial roll-out of our AquaRefining modules and the ramp up the production of AquaRefined lead.

Certain industry participants may have the ability to restrict our access to used LABs and otherwise focus significant competitive pressure on us. We believe that our primary competition will come from operators of existing smelters and other parties invested in the existing supply chain for smelting, both of which may resist the change presented by our AquaRefining process. Competition from such incumbents may come in the form of restricted access to used LABs. We believe that LAB manufacturers who also

maintain their own smelting operations control a significant part of the market for used LABs. We will require access to used LABs at market prices in order to carry out our business plan. If those LAB manufacturers and others involved in the reverse supply chain for used LABs attempt to restrict our access to used LABs, that may adversely affect our prospects and future growth. There can be no assurance that we will be able to effectively withstand the pressures applied by our competition.

Even if we are successful in recycling lead using our processes, there can be no assurance that the AquaRefined lead will meet the certification and purity requirements of our potential customers. A key component of our business plan is to produce recycled lead through our AquaRefining process of the highest purity (at least 99.99% pure lead), which we refer to as AquaRefined lead. We believe that our AquaRefined lead will provide us with revenue premium over the market price of lead on the London Metal Exchange, or LME, and, more importantly, our ability to produce AquaRefined lead will be vital to confirming the efficacy and relevancy of our proprietary technology. Our customers will require that our AquaRefined lead meet certain minimum purity standards and, in all likelihood, require independent assays to confirm the lead's purity. As of the date of this prospectus supplement, we have produced limited quantities of AquaRefined lead and in November 2018 Johnson Controls confirmed its approval of the purity of our AquaRefined lead by providing to us official vendor approval to receive finished lead at its manufacturing facilities. However, we have not produced AquaRefined lead in commercial quantities and there can be no assurance that we will be able to do so or, if we are able to produce AquaRefined lead in commercial quantities, that such lead will continue to meet the required purity standards of our customers. If we are unable to commercially produce AquaRefined lead that meets the purity standards established by our customers, our entire business plan may be invalidated and you may suffer the loss of your entire investment.

While we have been successful in producing AquaRefined lead in small volumes, there can be no assurance that we will be able to replicate the process, along with all of the expected economic advantages, on a large commercial scale either for us or our prospective licensees. As of the date of this prospectus supplement, our commercial operations have primarily involved the production of lead compounds and plastics from recycled LABs and, in April 2018, we commenced the limited commercial production of lead bullion, including AquaRefined lead. While we believe that our development, testing and limited production to date has validated the concept of our AquaRefining process, the limited nature of our operations to date are not sufficient to confirm the economic returns on our production of recycled lead. There can be no assurance that the commencement of commercial production of AquaRefined lead at our TRIC facility will not incur unexpected costs or setbacks that might restrict the desired scale of our intended operations or that we will be to produce AquaRefined lead in commercial quantities at a cost of production that will provide us with an adequate profit margin.

We have completed the construction of our initial LAB recycling facility at TRIC, however we have been delayed in the completion of our lead recycling operations at TRIC and we may encounter further delays. We completed the construction of our initial LAB recycling facility at TRIC in August 2016 and commenced the limited production of recycled lead in the first quarter of 2017. However, as of the date of this prospectus supplement, our commercial operations have primarily involved the production of lead compounds and plastics from recycled LABs and, to a lesser extent, the sale of lead bullion, including AquaRefined lead. As of December 2017, we had installed 16 AquaRefining modules. However, we encountered an issue which required the retrofitting of all 16 modules. As of the date of this prospectus supplement, we have substantially completed the retrofit of all 16 modules for this particular issue and have brought the first four modules into commercial operation, however we continue to experience performance and production issues that prevent us from running the initial four modules on a continuous basis. As we ramp-up production of the first four modules and endeavor to bring the additional 12 modules into commercial operation, we expect to continue to adjust the modules to enhance operations. However, due to the delays and unforeseen issues in the completion of the AquaRefining production line we have experienced to date, there can be no assurance that we will not encounter additional delays and issues. In addition, since our lead recycling production line at TRIC is the first-of-its-kind, neither we nor anyone else has ever built a facility of this nature and there can be no assurance that we will not experience additional operational delays and issues, including significant downtime from time to time, as we progress into the commercial production of AquaRefined lead. There can be no assurance that the commencement of commercial AquaRefining operations at our TRIC facility will not incur unexpected costs or hurdles that might restrict the desired scale of our intended operations or negatively impact our projected gross profit margin.

Our business may be negatively affected by labor issues and higher labor costs. Our ability to maintain our workforce depends on our ability to attract and retain new and existing employees. As of the date of this prospectus supplement, none of our employees are covered by collective bargaining agreements and we consider our labor relations to be acceptable. However, we could experience workforce dissatisfaction which could trigger bargaining issues, employment discrimination liability issues as well as wage and benefit consequences, especially during critical operation periods. We could also experience a work stoppage or other disputes which could disrupt our operations and could harm our operating results. In addition, legislation or changes in regulations could result in labor shortages and higher labor costs. There can be no assurance that we may not experience labor issues that negatively impact our operations or results of operations.

Our intellectual property rights may not be adequate to protect our business. As of the date of this prospectus supplement, we have secured one US patent (US 9837689) and international patents in Korea (Korea Patent No. 10-1739414), Japan (Japan Patent No. 6173595), China (CN 105981212), Australia (Australia Patent No. AU2014353227), Canada (CA 2930945), African Intellectual Property Organization (OA 17808), Mexico (MX 357027) and South Africa (ZA 2016.04083). We also have received further allowances for a patent in Australia, Europe, Ukraine, and Korea, and have further patent applications pending in the United States and numerous corresponding patent applications pending in 20 additional jurisdictions relating to certain elements of the technology underlying our AquaRefining process and related apparatus and chemical formulations. However, no assurances can be given that any patent issued, or any patents issued on our current and any future patent applications, will be sufficiently broad to adequately protect our technology. In addition, we cannot assure you that any patents issued now or in the future will not be challenged, invalidated, or circumvented.

Even patents issued to us may not stop a competitor from illegally using our patented processes and materials. In such event, we would incur substantial costs and expenses, including lost time of management in addressing and litigating, if necessary, such matters. Additionally, we rely upon a combination of trade secret laws and nondisclosure agreements with third parties and employees having access to confidential information or receiving unpatented proprietary know-how, trade secrets and technology to protect our proprietary rights and technology. These laws and agreements provide only limited protection. We can give no assurance that these measures will adequately protect us from misappropriation of proprietary information.

Our processes may infringe on the intellectual property rights of others, which could lead to costly disputes or disruptions. The applied science industry is characterized by frequent allegations of intellectual property infringement. Though we do not expect to be subject to any of these allegations, any allegation of infringement could be time consuming and expensive to defend or resolve, result in substantial diversion of management resources, cause suspension of operations or force us to enter into royalty, license, or other agreements rather than dispute the merits of such allegation. If patent holders or other holders of intellectual property initiate legal proceedings, we may be forced into protracted and costly litigation. We may not be successful in defending such litigation and may not be able to procure any required royalty or license agreements on acceptable terms or at all.

Our business strategy includes licensing arrangements and entering into joint ventures and strategic alliances, however as of the date of this prospectus supplement we have no such agreements in place and there can be no assurance we will be able to do so. Failure to successfully integrate such licensing arrangements, joint ventures, or strategic alliances into our operations could adversely affect our business. We propose to commercially exploit our AquaRefining process, in part, by licensing our technology to third parties and entering into joint ventures and strategic relationships with parties involved in the manufacture and recycling of LABs, including Johnson Controls, among others. However, as of the date of this prospectus supplement, we have not entered into any such licensing, joint venture or strategic alliance agreements, apart from our equipment supply agreement with Johnson Controls, and there can be no assurance that we will be able to do so on terms that benefit us, if at all. In addition, licensing programs, joint ventures and strategic alliances may involve significant other risks and uncertainties, including distraction of management's attention away from normal business operations, insufficient revenue generation to offset liabilities assumed and expenses associated with the transaction, and unidentified issues not discovered in our due diligence process, such as product quality, technology issues and legal contingencies. In addition, we may be unable to effectively integrate any such programs and ventures into our operations. Our operating results could be adversely affected by any problems arising during or from any licenses, joint ventures or strategic alliances.

There can be no assurance that we will be able to negotiate our key agreement with Johnson Controls on commercially reasonable terms, or at all. In February 2017, we entered into a series of agreements with Johnson Controls, including an equipment supply agreement pursuant to which, among other things, we agreed to work with Johnson Controls on the development of a program for the conversion of Johnson Controls and certain strategic partners of Johnson Controls' existing lead smelters throughout North America, China and Europe to a lead recycling process utilizing our AquaRefining technology and equipment, know-how and services. The equipment supply agreement discusses the development of the conversion program in general terms and contemplates that the parties will enter into a definitive development program agreement that is based on the general terms set forth in the equipment supply agreement and provides more detailed terms and conditions, including the economic obligations and rights of each party. We have agreed not to license our AquaRefining technology and equipment to third parties in the aforementioned regions until such time as we and Johnson Controls have agreed on certain matters relating to the initial conversion of a Johnson Controls facility. Johnson Controls and we have agreed to use good faith, commercial best-efforts to conclude the discussion and negotiation of the development program agreement no later than April 30, 2019, and to enter into a definitive development program agreement no later than June 30, 2019. The equipment supply agreement may be terminated by either party upon 60 days' prior written notice if the parties have not entered into the development program agreement by June 30, 2019. There can be no assurance that we will be able to negotiate and conclude a definitive development program agreement with Johnson Controls on commercially reasonable terms, or at all.

We are dependent on a limited number of suppliers of certain materials used in our AquaRefining process and our inability to obtain these materials as and when needed could cause a material disruption in our operations. Our AquaRefining process involves a significant number of elements, chemicals, solvents and other materials, in addition to used LABs. There are a limited number of suppliers of certain materials used in our AquaRefining process and we have no agreements in place for our supply of such materials. Our ability to conduct our AquaRefining process on a commercial scale will depend significantly on obtaining timely and adequate supply of these materials on competitive terms. Our inability to source these materials on a timely and cost-efficient manner could interrupt our operations, significantly limit our revenue sales and increase our costs. This factor could also impair our ability to meet our commitments to supply our customers. Our inability to obtain these materials as and when needed could cause a material disruption in our operations.

If we are unable to manage future expansion effectively, our business, operations and financial condition may suffer significantly, resulting in decreased productivity. If our AquaRefining process proves to be commercially viable, growth and expansion activities could place a significant strain on our managerial, administrative, technical, operational and financial resources. Our organization, procedures and management may not be adequate to fully support the expansion of our operations or the efficient execution of our business strategy. If we are unable to manage future expansion effectively, our business, operations and financial condition may suffer significantly, resulting in decreased productivity.

We may experience significant fluctuations in raw material prices and the price of our principal product, either of which could have a material adverse effect on our liquidity, growth prospects and results of operations. Used LABs are our primary raw material and we believe that in recent years the cost of used LABs has been volatile at times. In addition, we believe that the cost of used LABs can be seasonal, with prices trending lower in the winter months (as automobile owners increase their purchase of new LABs, thereby putting a greater number of used LABs on the market) and trend higher in the spring (as the purchase of new LABs, and supply of used LABs, decreases). Our principal product, recycled lead, has also experienced price volatility from time to time as well. For example, the market price of lead on the London Metal Exchange, or LME, during 2017 ranged from approximately \$2,000 to \$2,600 per tonne. While we intend to pursue supply and tolling arrangements as appropriate to offset any price volatility, the volatile nature of prices for used LABs and recycled lead could have an adverse impact on our liquidity, growth prospects and results of operations.

Global economic conditions could negatively affect our prospects for growth and operating results. Our prospects for growth and operating results will be directly affected by the general global economic conditions of the industries in which our suppliers, partners and customer groups operate. We believe that the market price of our principal product, recycled lead, is relatively volatile and reacts to general global economic conditions. Lead prices decreased from \$2,139 per tonne on May 5, 2015 to a low of \$1,554 per tonne on November 23, 2015 because of fluctuations in the market. A month later, the price per tonne increased back up to \$1,801 per tonne; the price per tonne was \$2,005 on December 31, 2018. Our business will be highly dependent on the economic and market conditions in each of the geographic areas in which we operate. These conditions affect our business by reducing the demand for LABs and decreasing the price of lead in times of economic down turn and increasing the price of used LABs in times of increasing demand of LABs and recycled lead. There can be no assurance that global economic conditions will not negatively impact our liquidity, growth prospects and results of operations.

We are subject to the risks of conducting business outside the United States. A part of our strategy involves our pursuit of growth opportunities in certain international market locations. We intend to pursue licensing or joint venture arrangements with local partners who will be primarily responsible for the day-to-day operations. Any expansion outside of the US will require significant management attention and financial resources to successfully develop and operate any such facilities, including the sales, supply and support channels, and we cannot assure you that we will be successful or that our expenditures in this effort will not exceed the amount of any resulting revenues. Our international operations expose us to risks and challenges that we would otherwise not face if we conducted our business only in the United States, such as:

- increased cost of enforcing our intellectual property rights;
- heightened price sensitivities from customers in emerging markets;
- our ability to establish or contract for local manufacturing, support and service functions;
- localization of our LABs and components, including translation into foreign languages and the associated expenses;
- compliance with multiple, conflicting and changing governmental laws and regulations;
- foreign currency fluctuations;
- laws favoring local competitors;
- weaker legal protections of contract terms, enforcement on collection of receivables and intellectual property rights and mechanisms for enforcing those rights;
- market disruptions created by public health crises in regions outside the United States;
- difficulties in staffing and managing foreign operations, including challenges presented by relationships with workers' councils and labor unions;
- issues related to differences in cultures and practices; and
- changing regional economic, political and regulatory conditions.

U.S. Government regulation and environmental, health and safety concerns may adversely affect our business. Our operations in the United States will be subject to the Federal, State and local environmental, health and safety laws applicable to the reclamation of lead acid batteries. Our facilities will have to obtain environmental permits or approvals to operate, including those associated with air emissions, water discharges, and waste management and storage. We may face opposition from local residents or public interest groups to the installation and operation of our facilities. In addition to permitting requirements, our operations are subject to environmental health, safety and transportation laws and regulations that govern the management of and exposure to hazardous materials such as the lead and acids involved in battery reclamation. These include hazard communication and other occupational safety requirements for employees, which may mandate industrial hygiene monitoring of employees for potential exposure to lead. Failure to comply with these requirements could subject our business to significant penalties (civil or criminal) and other sanctions that could adversely affect our business.

In the event we are unable to present and operate our AquaRefining process and operations as safe and environmentally responsible, we may face opposition from local governments, residents or public interest groups to the installation and operation of our facilities.

The development of new AquaRefining facilities by us or our partners or licensees, and the expansion of our operations at TRIC, will depend on our ability to acquire necessary permits and approvals, of which there can be no assurance. As noted above, our AquaRefining facilities will have to obtain environmental permits or approvals to operate, including those associated with air emissions, water discharges, and waste management and storage. In addition, we expect that our planned expansion of AquaRefining operations at TRIC will require additional permitting and approvals. Failure to secure (or significant delays in securing) the necessary permits and approvals could prevent us and our partners and licensees from pursuing additional AquaRefining facilities or expanding operations at TRIC, and otherwise adversely affect our business, financial results and growth prospects. Further, the loss of any necessary permit or approval could result in the closure of an AquaRefining facility and the loss of our investment associated with such facility.

Our business involves the handling of hazardous materials and we may become subject to significant fines and other liabilities in the event we mishandle those materials. The nature of our operations involves risks, including the potential for exposure to hazardous materials such as lead, that could result in personal injury and property damage claims from third parties, including employees and neighbors, which claims could result in significant costs or other environmental liability. Our operations also pose a risk of releases of hazardous substances, such as lead or acids, into the environment, which can result in liabilities for the removal or remediation of such hazardous substances from the properties at which they have been released, liabilities which can be imposed regardless of fault, and our business could be held liable for the entire cost of cleanup even if we were only partially responsible. We are also subject to the possibility that we may receive notices of potential liability in connection with materials that were sent to third-party recycling, treatment, and/or disposal facilities under the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (“CERCLA”), and comparable state statutes, which impose liability for investigation and remediation of contamination without regard to fault or the legality of the conduct that contributed to the contamination, and for damages to natural resources. Liability under CERCLA is retroactive, and, under certain circumstances, liability for the entire cost of a cleanup can be imposed on any responsible party. Any such liability could result in judgments or settlements that restrict our operations in a manner that materially adversely effects our operations and could result in fines, penalties or awards that could materially impair our financial condition and even threaten our continued operation as a going concern.

We will be subject to foreign government regulation and environmental, health and safety concerns that may adversely affect our business. As our business expands outside of the United States, our operations will be subject to the environmental, health and safety laws of the countries where we do business, including permitting and compliance requirements that address the similar risks as do the laws in the United States, as well as international legal requirements such as those applicable to the transportation of hazardous materials. Depending on the country or region, these laws could be as stringent as those in the US, or they could be less stringent or not as strictly enforced. In some countries in which we are interested in expanding our business, such as Mexico and China, the relevant environmental regulatory and enforcement frameworks are in flux and subject to change. Compliance with these requirements will cause our business to incur costs, and failure to comply with these requirements could adversely affect our business.

In the event we are unable to present and operate our AquaRefining process and operations as safe and environmentally responsible, we may face opposition from local governments, residents or public interest groups to the installation and operation of our facilities.

Risks Related to Owning Our Common Stock

A securities class action lawsuit and shareholder derivative lawsuit are pending against us and could have a material adverse effect on our business, results of operations and financial condition. A putative class action lawsuit and shareholder derivative lawsuit are pending against us and certain of our directors and officers. These lawsuits may divert financial and management resources that would otherwise be used to benefit our operations. Although we deny the material allegations in the lawsuits and intend to defend ourselves vigorously, defending the lawsuits could result in substantial costs. No assurances can be given that the results of these matters will be favorable to us. An adverse resolution of any of these lawsuits could have a material adverse effect on our results of operations and financial condition. In addition, we may be the target of securities-related litigation in the future, both related and unrelated to the existing class action and shareholder derivative lawsuits. Such litigation could divert our management’s attention and resources, result in substantial costs, and have an adverse effect on our business, results of operations and financial condition.

We maintain director and officer insurance that we regard as reasonably adequate to protect us from potential claims, however we are responsible for meeting certain deductibles under the policies and, in any event, we cannot assure you that it will. Further, as a result of the pending litigation the costs of insurance may increase and the availability of coverage may decrease. As a result, we may not be able to maintain our current levels of insurance at a reasonable cost, or at all, which might make it more difficult to attract qualified candidates to serve as executive officers or directors.

Our common stock is thinly traded and our share price has been volatile. Our common stock has traded on the Nasdaq Capital Market, under the symbol “AQMS”, since July 31, 2015. Since that date, our common stock has at times been relatively thinly traded and subject to price volatility. There can be no assurance that we will be able to successfully maintain a liquid market for our common shares. The stock market in general, and early stage public companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of such companies. If we are unable to develop and maintain a liquid market for our common shares, you may not be able to sell your common shares at prices you consider to be fair or at times that are convenient for you, or at all. In addition, following periods of volatility in the market price of a company’s securities, litigation has often been brought against that company and we may become the target of litigation as a result of price volatility. Litigation could result in substantial costs and divert our management’s attention and resources from our business. This could have a material adverse effect on our business, results of operations and financial condition.

We are an “emerging growth company” under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors. We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (“JOBS Act”), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements;
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments; and
- extended transition periods available for complying with new or revised accounting standards.

We have chosen to “opt out” of the extended transition periods available for complying with new or revised accounting standards, but we intend to take advantage of all of the other benefits available under the JOBS Act, including the exemptions discussed above. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We will remain an “emerging growth company until 2020, although we will lose that status sooner if our revenues exceed \$1.07 billion, if we issue more than \$1.07 billion in non-convertible debt in a three-year period, or if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of any June 30.

Our status as an “emerging growth company” under the JOBS Act may make it more difficult to raise capital as and when we need it. Because of the exemptions from various reporting requirements provided to us as an “emerging growth company,” we may be less attractive to investors and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our reporting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

We have not paid dividends in the past and have no plans to pay dividends. We plan to reinvest all of our earnings, to the extent we have earnings, in order to develop our recycling centers and cover operating costs and to otherwise become and remain competitive. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on our common stock.

Shares eligible for future sale may adversely affect the market for our common stock. Of the 38,932,440 shares of our common stock outstanding as of the date of this prospectus supplement, approximately 35,092,396 shares are held by “non-affiliates” and are freely tradable without restriction pursuant to Rule 144. In addition, in August 2016, we filed with the SEC a Registration Statement on Form S-3 for purposes of registering the resale of 3,711,872 shares of restricted common stock sold to Interstate Battery in May 2016, including 3,009,625 shares of common stock issuable to Interstate Battery upon exercise of its warrants and conversion of its convertible note, and in February 2017, we filed with the SEC a Registration Statement on Form S-3 for purposes of registering the resale of the 939,005 shares of restricted common stock we sold to Johnson Controls in February 2017. Both registration statements were declared effective by the SEC and the shares registered thereunder are eligible for sale without restriction. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus may have a material adverse effect on the market price of our common stock.

You will experience immediate dilution in the book value per share of the common stock you purchase. Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ _____ per share in the net tangible book value of the common stock you purchase in this offering. See “Dilution” for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock in this offering.

Our management will have broad discretion over the use of the net proceeds from this offering, and we may not use these proceeds effectively or in a manner with which you agree. We intend to use the net proceeds from this offering for working capital and general corporate purposes. Our management will have broad discretion in the application of the net proceeds we receive from this offering, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used effectively or in a manner with which you agree. The net proceeds may be used for corporate purposes that do not increase our operating results or market value. Until the net proceeds are used, they may be placed in investments that do not produce income or that lose value.

Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable. Provisions of our certificate of incorporation and bylaws and applicable provisions of Delaware law may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. The provisions in our certificate of incorporation and bylaws:

- limit who may call stockholder meetings;
- do not permit stockholders to act by written consent;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
- do not provide for cumulative voting rights; and
- provide that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

In addition, Section 203 of the Delaware General Corporation Law may limit our ability to engage in any business combination with a person who beneficially owns 15% or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of three years following the share acquisition. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price of our common stock.

Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with the Company. Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us or any our directors, officers or other employees arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws, or (iv) any action asserting a claim against us or any our directors, officers or other employees governed by the internal affairs doctrine. This forum selection provision in our bylaws may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or any our directors, officers or other employees.

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus and the documents we have filed with the SEC that are incorporated by reference herein and therein contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In addition, from time to time we or our representatives have made or will make forward-looking statements in various other filings that we make with the SEC or in other documents, including press releases or other similar announcements. Forward-looking statements concern our current plans, intentions, beliefs, expectations and statements of future economic performance. Statements containing terms such as “will,” “may,” “believe,” “do not believe,” “plan,” “expect,” “intend,” “estimate,” “anticipate” and other phrases of similar meaning are considered to be forward-looking statements.

Forward-looking statements are based on our assumptions and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those reflected in or implied by these forward-looking statements. Factors that might cause actual results to differ include, among others, those set forth under “Risk Factors” in this prospectus supplement and those discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operation” in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q and in our future periodic reports filed with the SEC, all of which are incorporated by reference herein. Readers are cautioned not to place undue reliance on any forward-looking statements contained in this prospectus supplement, the accompanying base prospectus or the documents we have filed with the SEC that are incorporated by reference herein and therein, which reflect management’s views and opinions only as of their respective dates. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements, except to the extent required by applicable securities laws. You are advised, however, to consult any additional disclosures we have made or will make in the filings we make with the SEC, including reports on Forms 10-K, 10-Q and 8-K. All subsequent forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this prospectus supplement, the accompanying base prospectus or any related issuer free writing prospectus.

USE OF PROCEEDS

We estimate that our net proceeds from this offering will be approximately \$ (or approximately \$ if the underwriters exercise their over-allotment option in full), after deducting the underwriting discount and estimated offering expenses payable by us.

We expect to use the net proceeds from this offering for working capital, which could include capital expenditures related to addressing operational efficiencies and the expansion of production activities at TRIC, and general corporate purposes. This represents our best estimate of the manner in which we will use the net proceeds we receive from this offering based upon the current status of our business, but we have not reserved or allocated amounts for specific purposes and we cannot specify with certainty how or when we will use any of the net proceeds. Amounts and timing of our actual expenditures will depend on numerous factors, including our success in the large-scale recycling of used LABs, operational decisions concerning the expansion of production of recycled lead at our TRIC facility and the amount of cash we use in our operations. Our management will have broad discretion in applying the net proceeds from this offering.

Pending the uses described above, we intend to invest the net proceeds from this offering in short-term, investment-grade interest-bearing securities such as money market accounts, certificates of deposit, commercial paper, and guaranteed obligations of the U.S. government.

DILUTION

If you invest in our common stock, you will experience immediate dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock after this offering.

Our net tangible book value as of September 30, 2018 was approximately \$56.5 million, or approximately \$1.46 per share. Net tangible book value is determined by subtracting our total liabilities from our total tangible assets, and net tangible book value per share is determined by dividing our net tangible book value by the number of outstanding shares of our common stock. After giving effect to the sale of shares of our common stock in this offering at the public offering price of \$ per share, and after deducting the underwriting discount and estimated offering expenses payable by us, our adjusted net tangible book value as of September 30, 2018 would have been approximately \$, or approximately \$ per share. This represents an immediate increase in net tangible book value of approximately \$ per share to our existing stockholders and an immediate dilution in net tangible book value of approximately \$ per share to investors participating in this offering. The following table illustrates this calculation on a per share basis:

Public offering price per share of common stock		\$
Net tangible book value per share as of September 30, 2018	\$	1.46
Increase per share attributable to investors participating in this offering	\$	
Adjusted net tangible book value per share after giving effect to this offering		\$
Dilution per share to investors participating in this offering		\$

If the underwriters exercise in full their option to purchase an additional shares of common stock at the public offering price of \$ per share, our adjusted net tangible book value as of September 30, 2018, after giving effect to this offering, would have been approximately \$ per share, representing an increase in net tangible book value of approximately \$ per share to existing stockholders and immediate dilution in net tangible book value of approximately \$ per share to investors participating in this offering.

The above discussion and table is based on 39,140,381 shares of common stock outstanding as of the date of this prospectus supplement, and excludes the following:

- 1,980,123 shares of common stock issuable upon exercise of options outstanding as of the date of this prospectus supplement, which have a weighted average exercise price of \$4.17 per share;
- 343,375 shares of common stock issuable upon vesting of restricted stock units as of the date of this prospectus supplement;
- 60,894 shares of common stock reserved for issuance and available for future grant under our 2014 Stock Incentive Plan as of the date of this prospectus supplement;
- 245,562 shares of common stock reserved for issuance under our Officer and Director Share Purchase Plan as of the date of this prospectus supplement;
- 2,340,828 shares of common stock issuable upon exercise of warrants outstanding as of the date of this prospectus supplement, which have a weighted average exercise price of \$ per share; and
- 702,247 shares of common stock issuable upon conversion of \$5 million of outstanding principal under a convertible note issued to Interstate Battery Systems International, Inc., which is convertible into shares of our common stock at a conversion price of \$7.12 per share.

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options or warrants to purchase our common stock and no conversion of our outstanding convertible note. The exercise of outstanding options or warrants, or the conversion of our outstanding convertible note, having an exercise or conversion price less than the offering price would increase dilution to investors participating in this offering. In addition, we may choose to raise additional capital depending on market conditions, our capital requirements and strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through our sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

UNDERWRITING

We are offering the shares of common stock described in this prospectus supplement through the underwriter, National Securities Corporation.

We have entered into an underwriting agreement with the underwriter prior to the closing of this offering. Subject to the terms and conditions of the underwriting agreement, we will agree to sell to the underwriter, and the underwriter will agree to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement, shares of our common stock.

The underwriter is committed to purchase all the shares of common stock offered by us, other than those covered by the option to purchase additional shares described below, if they purchase any shares. The underwriting agreement provides that the underwriter's obligations to purchase shares of our common stock are subject to conditions contained in the underwriting agreement. A copy of the underwriting agreement will be filed as an exhibit to the Current Report on Form 8-K that expect to file on January , 2019 and will be incorporated by reference to the registration statement of which this prospectus is a part.

We have been advised by the underwriter that the underwriter proposes to offer shares of our common stock directly to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers that are members of the Financial Industry Regulatory Authority (FINRA). Any securities sold by the underwriter to such securities dealers will be sold at the public offering price less a selling concession not in excess of \$ per share. After the public offering of the shares, the offering price and other selling terms may be changed by the underwriter.

None of our securities included in this offering may be offered or sold, directly or indirectly, nor may this prospectus supplement and any other offering material in connection with the offer and sales of any of our common stock be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons who receive this prospectus supplement are advised to inform themselves about and to observe any restrictions relating to this offering of our common stock and the distribution of this prospectus supplement. This prospectus supplement is neither an offer to sell nor a solicitation of any offer to buy any of our common stock included in this offering in any jurisdiction where that would not be permitted or legal.

The underwriter has advised us that it does not intend to confirm sales to any accounts over which it exercises discretionary authority.

Underwriter's Discount and Expenses

The following table summarizes the per share underwriting discount to the public offering price of the shares offered pursuant to this prospectus supplement.

	Per Share	Total	
		Without Exercise of Option to Purchase Additional Common Shares	With Exercise of Option to Purchase Additional Common Shares
Underwriting discount for common stock to be paid by us	\$	\$	\$

We estimate that the total expenses of the offering, excluding the underwriting discount, will be approximately \$. This includes \$30,000 of non-accountable fees and expenses of the underwriter, including the legal fees of the underwriter's counsel. These expenses are payable by us.

After deducting fees due to the underwriter and our estimated offering expenses, we expect our net proceeds from this offering to be approximately \$.

Over-allotment Option

We have granted to the underwriter an option, exercisable not later than 45 days after the date of this prospectus supplement, to purchase up to an additional shares of our common stock (up to 15% of the shares firmly committed in this offering) at the public offering price, less the underwriting discount, set forth on the cover page of this prospectus supplement. The underwriter may exercise the option solely to cover over-allotments, if any, made in connection with this offering. If any additional shares of our common stock are purchased pursuant to the over-allotment option, the underwriter will offer these additional shares of our common stock on the same terms as those on which the other shares of common stock are being offered hereby.

Underwriter Warrant

We have agreed to issue to the underwriter and its designees a warrant to purchase shares of our common stock in an aggregate amount up to 2% of the shares of common stock sold in this offering (including the over-allotment option). This warrant is exercisable at \$ per share (100% of the price of the common stock sold in this offering), commencing the later of six months after the closing date of this offering or such time as we amend our charter to increase our authorized shares of common stock. The warrant expires five years from the effective date of this offering. The warrant and the shares of common stock underlying the warrant have been deemed compensation by FINRA and are therefore subject to a 180 day lock-up pursuant to Rule 5110(g)(1) of FINRA. National Securities Corporation (or permitted its assignees under the Rule) will not sell, transfer, assign, pledge, or hypothecate this warrant or the securities underlying this warrant, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of this warrant or the underlying securities for a period of 180 days from the effective date of the offering.

Indemnification

We have agreed to indemnify the underwriter and its officers and directors against certain liabilities, including certain liabilities arising under the Securities Act, and to contribute to payments that the underwriter may be required to make for these liabilities.

Short Positions and Penalty Bids

The underwriter may engage in over-allotment, syndicate covering transactions, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Securities Exchange Act of 1934.

Over-allotment involves sales by the underwriter of shares in excess of the number of shares the underwriter is obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by an underwriter is not greater than the number of shares that it may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriter may close out any short position by either exercising its over-allotment option and/or purchasing shares in the open market.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through the over-allotment option. If an underwriter sells more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if an underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Penalty bids permit an underwriter to reclaim a selling concession from a syndicate member when the shares originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NASDAQ Capital Market, and if commenced, they may be discontinued at any time.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that any transaction, once commenced, will not be discontinued without notice.

Electronic Distribution

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by the underwriter, or by its affiliates. In those cases, prospective investors may view offering terms online and, depending upon the underwriter, prospective investors may be allowed to place orders online. The underwriter may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriter on the same basis as other allocations.

Other than the prospectus in electronic format, the information on the underwriter's website and any information contained in any other website maintained by the underwriter is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriter in its capacity as underwriter and should not be relied upon by investors.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement will be passed upon for us by Greenberg Traurig, LLP, Irvine, California. Golenbock Eiseman Assor Bell & Peskoe LLP, New York, New York, is acting as counsel for the underwriter in connection with this offering.

EXPERTS

The consolidated financial statements of Aqua Metals, Inc. and its wholly-owned subsidiaries included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 have been audited by Armanino LLP, an independent registered public accounting firm, as stated in their report which is incorporated by reference herein, and has been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC permits us to “incorporate by reference” the information and reports we file with it. This means that we can disclose important information to you by referring to another document. The information that we incorporate by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC automatically updates and supersedes this information. We incorporate by reference the documents listed below, except to the extent information in those documents is different from the information contained in this prospectus supplement, and all future documents filed with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (other than the portions thereof deemed to be furnished to the SEC pursuant to Item 9 or Item 12) until we terminate the offering of these securities:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which was filed on March 15, 2018;
- Our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2018, which was filed on May 9, 2018;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, which was filed on August 8, 2018;
- Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, which was filed on November 7, 2018;
- Our Current Reports on Form 8-K, which were filed on March 28, 2018, April 2, 2018, April 12, 2018, April 25, 2018, May 2, 2018, June 13, 2018, June 14, 2018, August 16, 2018, September 27, 2018, November 9, 2018, December 6, 2018, and January 9, 2019;
- The description of our common stock in our Form 8-A12B, which was filed on July 24, 2015, and any amendments or reports filed for the purpose of updating this description; and
- All documents we file with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering made by way of this prospectus.

To the extent that any statement in this prospectus supplement is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus supplement, the statement in this prospectus supplement shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus supplement or the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to our various filings made with the SEC.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Aqua Metals, Inc.
Attn: Investor Relations
2500 Peru Drive
McCarran, Nevada 89434
(510) 479-7635

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement under the Securities Act (SEC File No. 333-213501) that registers the securities offered hereby. The registration statement, including the exhibits and schedules attached thereto and the information incorporated by reference therein, contains additional relevant information about the securities and our Company, which we are allowed to omit from this prospectus supplement pursuant to the rules and regulations of the SEC. In addition, we file annual, quarterly and current reports and proxy statements and other information with the SEC. You may read and copy any document that we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available on the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.aquametals.com. We have not incorporated by reference into this prospectus supplement the information on our website and it is not a part of this document.

PROSPECTUS

\$100,000,000

AQUA METALS, INC.

**Common Stock
Warrants
Units
Debt Securities**

We may issue securities from time to time in one or more offerings of up to \$100,000,000 in aggregate offering price. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

Our common stock is listed on The NASDAQ Capital Market under the symbol "AQMS". On August 31, 2016, the last reported sale price of our common stock on The NASDAQ Capital Market was \$9.24 per share.

Investing in these securities involves significant risks. See "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is September 26, 2016

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
ABOUT AQUA METALS, INC.	1
RISK FACTORS	2
NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
THE SECURITIES WE MAY OFFER	3
DESCRIPTION OF DEBT SECURITIES	3
DESCRIPTION OF WARRANTS	11
DESCRIPTION OF UNITS	12
PLAN OF DISTRIBUTION	13
LEGAL MATTERS	15
EXPERTS	15
WHERE YOU CAN FIND MORE INFORMATION	15
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	15

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the “SEC,” utilizing a “shelf” registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings for an aggregate initial offering price of up to \$100,000,000.

This prospectus provides you with a general description of the securities we may offer. From time to time, we may provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any accompanying prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” beginning on page 15 of this prospectus.

We have not authorized anyone to provide you with information different from that contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We do not take any responsibility for, and cannot provide any assurance as to the reliability of, any information other than the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to “we,” “our” and “us” refer, collectively, to Aqua Metals, Inc., a Delaware corporation and its subsidiaries.

ABOUT AQUA METALS, INC.

We are engaged in the business of recycling lead through a novel, proprietary and patent-pending process that we developed and named “AquaRefining”. Lead is a globally traded commodity with a worldwide market value in excess of \$20 billion. Lead acid batteries, or LABs, are the primary use of all lead produced in the world. Because the chemical properties of lead allow it to be recycled and reused indefinitely, LABs are also the primary source of all lead production. As such, LABs are almost 100% recycled for purposes of capturing the lead contained therein for re-use. We believe that our proprietary AquaRefining process will provide for the recycling of LABs and the production of a pure grade lead with a significantly lower cost of production, and with fewer environmental and regulatory issues, than conventional methods of lead production.

In recent years, many lead mines have become exhausted and recycled lead has become increasingly important to LAB production. Recycled lead surpassed mined lead in the 1990s and now represents more than 50% of the lead content in new LABs. Whether it is produced from lead ore or recycled LABs, lead has historically been produced by smelting. Smelting is a high-temperature, endothermic chemical reduction, making it inefficient, energy intensive and often a highly pollutive process. As a consequence of its environmental and health issues, lead smelting has become increasingly regulated in developed countries. In the US, regulatory non-compliance has forced the closure of large high-capacity lead smelters in Vernon, California, Frisco, Texas and Herculaneum, Missouri over the last three years. Herculaneum was the last remaining primary lead-mine operation (i.e., smelting lead from ore) in the US, though secondary lead smelters that process recycled lead continue to operate in the US. In response, there has been an expansion of LAB smelting capacity in Mexico and other less regulated countries. The resulting transportation of used LABs from where they originate in the US to smelters in Mexico, the Philippines and elsewhere is an increasingly significant logistical and global environmental cost.

AquaRefining uses an aqueous solvent and a novel electro-chemical process to produce pure lead (i.e., higher than 99.99% purity). We believe that AquaRefining can significantly reduce production costs as compared with alternative methods of producing pure lead. This cost reduction is partly because our novel electro-chemical process requires less energy than the endothermic high temperature (1400°C) chemical reduction that is at the core of smelting. It is also partly because our process does not generate toxic high temperature dust and gas, or the lead containing slag and dross that are unavoidable byproducts of smelting, and which require capital and energy intensive processes to meet environmental compliance. We also have the potential to locate multiple smaller recycling facilities in areas closer to the source of used LABs, thereby reducing transport costs and supply chain bottlenecks. AquaRefining is a water-based ambient temperature process. On this basis, we believe that it significantly reduces environmental emissions, health concerns and permitting needs as compared with lead smelting. We believe that the combined advantages offered by AquaRefining represent a potential step change in lead recycling technology, one that can deliver advantages in economics, footprint and logistics while greatly reducing the environmental impact of lead recycling.

The modular nature of AquaRefining makes it possible to start LAB recycling at a much smaller scale than is possible with smelters, thereby significantly reducing the investment risk associated with building a lead production facility. Our plan is to actively explore distributed recycling in the US by establishing our own initial recycling operation near Reno, Nevada. This plan is based on our belief that Reno has become a significant hub of the West Coast's LAB distribution infrastructure and yet is very poorly served by the LAB recycling industry. From our initial recycling facility near Reno, we intend to expand first throughout the US and then overseas. We will seek to own our own recycling facilities but will also evaluate joint ventures and licensing in respect of our technologies.

Our principal executive offices are located at 1010 Atlantic Avenue, Alameda, California 94501, and our telephone number is (510) 479-7635.

RISK FACTORS

Investing in our securities involves significant risks. You should carefully consider the risks and uncertainties described in this prospectus and any accompanying prospectus supplement, including the risk factors in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Report on Form 10-Q or Current Report on Form 8-K, together with all of the other information appearing in or incorporated by reference into this prospectus and any applicable prospectus supplement, before making an investment decision pursuant to this prospectus and any accompanying prospectus supplement relating to a specific offering.

Our business, financial condition and results of operations could be materially and adversely affected by any or all of these risks or by additional risks and uncertainties not presently known to us or that we currently deem immaterial that may adversely affect us in the future.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and any accompanying prospectus supplement will contain, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1993. Also, documents that we incorporate by reference into this prospectus, including documents that we subsequently file with the Commission, will contain forward-looking statements. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words "may," "will," "could," "should," "expect," "anticipate," "intend," "estimate," "believe," "project," "plan," "assume" or other similar expressions, or negatives of those expressions, although not all forward-looking statements contain these identifying words. All statements contained or incorporated by reference in this prospectus and any prospectus supplement regarding our business strategy, future operations, projected financial position, potential strategic transactions, proposed participation or casino projects, projected sales growth, estimated future revenues, cash flows and profitability, projected costs, potential outcome of litigation, potential sources of additional capital, future prospects, future economic conditions, the future of our industry and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to certain risks, uncertainties and assumptions that are difficult to predict. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus, the date of any prospectus supplement, or, in the case of forward-looking statements incorporated by reference, the date of the filing that includes the statement. Over time, our actual results, performance or achievements may differ from those expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders. Except as required by law, we undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this prospectus and supplements to this prospectus under the caption “Risk Factors,” as well as in our most recent Annual Report on Form 10-K, including under the captions “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and in other documents that we may file with the Commission, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and any prospectus supplement.

THE SECURITIES WE MAY OFFER

We may offer and sell, from time to time in one or more offerings, any combination of common stock, warrants, units and debt securities having an aggregate initial offering price not exceeding \$100,000,000. In this prospectus, we refer to the common stock, warrants, units and debt securities that we may offer collectively as “securities.”

We are authorized to issue 50,000,000 shares of \$0.001 par value common stock. Holders of shares of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders generally. Stockholders are entitled to receive such dividends as may be declared from time to time by the board of directors out of funds legally available therefore, and in the event of liquidation, dissolution or winding up of the company to share ratably in all assets remaining after payment of liabilities. The holders of shares of common stock have no preemptive, conversion, subscription rights or cumulative voting rights.

This prospectus provides a general description of the securities we may offer other than our common stock. Each time we sell any of our securities under this prospectus, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information in this prospectus. For more information, see “About this Prospectus.”

DESCRIPTION OF DEBT SECURITIES

We may offer and sell, from time to time in one or more offerings, any combination of common stock, warrants, units and debt securities having an aggregate initial offering price not exceeding \$100,000,000. In this prospectus, we refer to the common stock, warrants, units and debt securities that we may offer collectively as “securities.”

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

None of the indentures will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The senior debt securities will constitute our unsubordinated general obligations and will rank pari passu with our other unsubordinated obligations. The subordinated debt securities will constitute our subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading “— Certain Terms of the Subordinated Debt Securities — Subordination.”

The debt securities will be our unsecured obligations unless otherwise specified in the applicable prospectus supplement. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and any free writing prospectus will include any additional or different terms of the debt securities or any series being offered, including the following terms:

- the title and type of the debt securities;
- whether the debt securities will be senior or subordinated debt securities, and, with respect to debt securities issued under the subordinated indenture the terms on which they are subordinated;
- the aggregate principal amount of the debt securities;
- the price or prices at which we will sell the debt securities;
- the maturity date or dates of the debt securities and the right, if any, to extend such date or dates;
- the rate or rates, if any, per year, at which the debt securities will bear interest, or the method of determining such rate or rates;
- the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;
- the right, if any, to extend the interest payment periods and the duration of that extension;
- the manner of paying principal and interest and the place or places where principal and interest will be payable;
- provisions for a sinking fund, purchase fund or other analogous fund, if any;
- any redemption dates, prices, obligations and restrictions on the debt securities;
- the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable;
- any conversion or exchange features of the debt securities;
- whether and upon what terms the debt securities may be defeased;

- any events of default or covenants in addition to or in lieu of those set forth in the indenture;
- whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions;
- whether the debt securities will be guaranteed as to payment or performance;
- if the debt securities of the series will be secured by any collateral and, if so, a general description of the collateral and the terms and provisions of such collateral security, pledge or other agreements; and
- any other material terms of the debt securities.

The applicable prospectus supplement will also describe any applicable material U.S. federal income tax consequences. When we refer to “principal” in this section with reference to the debt securities, we are also referring to “premium, if any.”

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked.

Certain Terms of the Senior Debt Securities

Covenants. Unless we indicate otherwise in a prospectus supplement, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries’ property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets. Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust (subject to certain exceptions provided for in the senior indenture);

- the successor entity assumes our obligations on the senior debt securities and under the senior indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- certain other conditions are met.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture for any series of senior debt securities:

- failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 90 days (or such other period as may be specified for such series);
- failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period);
- default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series;
- certain events of bankruptcy or insolvency, whether or not voluntary; and
- any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

Unless we indicate otherwise in a prospectus supplement, the default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs with respect to us and is continuing, the entire principal amount of and accrued interest, if any, on each series of senior debt securities then outstanding shall become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, prior to a declaration of acceleration and subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities or in respect of a covenant or provision of the senior indenture which cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto. For information as to the waiver of defaults, see “— Modification and Waiver.”

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

- the holder gives the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default;
- the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense;
- the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security to receive payment of the principal of and interest, if any, on such senior debt security in accordance with the terms of such debt security, or to bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge. We can satisfy and discharge our obligations to holders of any series of senior debt securities if:

- we pay or cause to be paid, as and when due and payable, the principal of and any interest on all senior debt securities of such series outstanding under the senior indenture; or
- all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year) and we deposit in trust a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

Under current U.S. federal income tax law, the deposit and our legal release from the senior debt securities would be treated as a taxable event, and beneficial owners of such debt securities would generally recognize any gain or loss on such senior debt securities. Purchasers of the senior debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance. Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any senior series of senior debt securities issued under the indentures.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the senior debt securities of any series (called “legal defeasance”) if certain conditions are met, including the following:

- We deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.
- There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.
- We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we ever did accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change of current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the senior debt securities (called “covenant defeasance”). In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the senior debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

- We must deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.
- We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.

If we accomplish covenant defeasance, you can still look to us for repayment of the senior debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

Modification and Waiver. We and the trustee may amend or supplement the senior indenture or the senior debt securities without the consent of any holder:

- to comply with the requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act;
- to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;

- to evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default;
- to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement;
- to provide for or add guarantors with respect to the senior debt securities of any series;
- to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture;
- to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms, purposes of issue, authentication and delivery of any series of senior debt securities;
- to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding; or
- to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

- extends the final maturity of any senior debt securities of such series;
- reduces the principal amount of any senior debt securities of such series;
- reduces the rate or extends the time of payment of interest on any senior debt securities of such series;
- reduces the amount payable upon the redemption of any senior debt securities of such series;
- changes the currency of payment of principal of or interest on any senior debt securities of such series;
- reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy;
- waives a default in the payment of principal of or interest on the senior debt securities;
- changes the provisions relating to the waiver of past defaults or changes or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor;

- modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification; or
- reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or to modify or amend or to waive certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Incorporators, Stockholders, Officers, Directors. The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee. The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds. All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such principal, premium or interest became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

Governing Law. The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term “senior indebtedness” of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

- all of the indebtedness of that person for money borrowed;
- all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;
- all of the lease obligations that are capitalized on the books of that person in accordance with generally accepted accounting principles;
- all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and
- all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated debt indenture.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of common stock, debt securities, and/or units from time to time. We may issue warrants independently or together with common stock and/or debt securities, and the warrants may be attached to or separate from those securities. If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which will be contracts between us and the holders of the warrants or an agent for the holders of the warrants. We encourage you to read the prospectus supplement that relates to any warrants we may offer, as well as the complete warrant agreement or warrant certificate that contain the terms of the warrants. If we issue warrants, the forms of warrant agreements and warrant certificates, as applicable, relating to the warrants will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination from time to time. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. If we issue units, they will be evidenced by unit agreements or unit certificates issued under one or more unit agreements, which will be contracts between us and the holders of the units or an agent for the holders of the units. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. We encourage you to read the prospectus supplement that relates to any units we may offer, as well as the complete unit agreement or unit certificate that contain the terms of the units. If we issue units, the forms of unit agreements and unit certificates, as applicable, relating to the units will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

PLAN OF DISTRIBUTION

We may sell our securities from time to time in any manner permitted by the Securities Act of 1933, as amended, or the Securities Act, including any one or more of the following ways:

- through agents;
- to or through underwriters;
- to or through broker-dealers (acting as agent or principal);
- in “at the market” offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise; and/or
- directly to purchasers, through a specific bidding or auction process or otherwise.

The securities may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth, in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

- the name or names of any agents, underwriters or dealers;
- the purchase price of our securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and commissions and other items constituting agents’ or underwriters’ compensation;
- the public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which such securities may be listed.

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

- transactions on The NASDAQ Capital Market or any other organized market where the securities may be traded;
- in the over-the-counter market;

- in negotiated transactions; or
- under delayed delivery contracts or other contractual commitments.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may indemnify agents, underwriters and dealers against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. Agents, underwriters or dealers, or their respective affiliates, may be customers of, engage in transactions with or perform services for us or our respective affiliates, in the ordinary course of business.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on The NASDAQ Capital Market. We may elect to list any other class or series of securities on any exchange and, in the case of our common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

To comply with the securities laws of certain states, if applicable, the securities offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus has been passed upon for us by Greenberg Traurig, LLP, Irvine, California.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2015 have been so incorporated in reliance on the report of Armanino LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. Our filings with the SEC also are available from the SEC's internet site at <http://www.sec.gov>, which contains reports, proxy and information statements, and other information regarding issuers that file electronically.

This prospectus is part of a registration statement that we filed with the SEC. As permitted by SEC rules, this prospectus and any accompanying prospectus supplement that we may file, which form a part of the registration statement, do not contain all of the information that is included in the registration statement. The registration statement contains more information regarding us and our securities, including certain exhibits. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC permits us to "incorporate by reference" the information and reports we file with it. This means that we can disclose important information to you by referring to another document. The information that we incorporate by reference is considered to be part of this prospectus, and later information that we file with the SEC automatically updates and supersedes this information. We incorporate by reference the documents listed below, except to the extent information in those documents is different from the information contained in this prospectus, and all future documents filed with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (other than the portions thereof deemed to be furnished to the SEC pursuant to Item 9 or Item 12) until we terminate the offering of these securities:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, which was filed on March 28, 2016;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, which was filed on May 19, 2016;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, which was filed on August 10, 2016;
- Our Current Reports on Form 8-K, which were filed on March 25, 2016 and May 24, 2016;
- The description of our common stock in our Form 8-A12B, which was filed on July 24, 2015, and any amendments or reports filed for the purpose of updating this description; and
- All documents we file with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering made by way of this prospectus.

To the extent that any statement in this prospectus is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus, the statement in this prospectus shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus or the registration statement. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to our various filings made with the SEC.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Aqua Metals, Inc.
Attn: Investor Relations
1010 Atlantic Avenue
Alameda, California 94501
(510) 479-7635



Shares of Common Stock

PRELIMINARY PROSPECTUS
SUPPLEMENT

Sole Book-running Manager

National Securities Corporation

January , 2019
