

RESOLUTION #23-073
RESOLUTION OF PASSAIC VALLEY WATER COMMISSION APPROVING
RESEARCH AND EVALUATION AGREEMENT

DATE OF ADOPTION: MAY 24, 2023

Approved as to form and legality by Law Department on basis of facts set forth by the Executive Director, Purchasing, and Engineering Departments.

Introduced by Commissioner: **JOSEPH KOLODZIEJ**

Seconded by Commissioner: **JEFF LEVINE**

WHEREAS, the Passaic Valley Water Commission ("PVWC") is currently in midst of a large-scale lead line replacing project (the "Project") and has contracted with Pacific Construction to perform the lead line replacement and CDM Smith to manage the Project; and

WHEREAS, Echologics LLC is engaged in research, development, and licensing of pipe condition assessment and water leak detection; and

WHEREAS, Echologics LLC seeks to accompany CDM Smith and/or its subcontractors to certain lead replacement sites in order evaluate its pre-existing technology for the development of new technologies or purposes relating to testing of newly developed technology solutions; and

WHEREAS, CDM Smith and Pacific have no objection to this request; and

WHEREAS, Echologics anticipates their activities to take place for approximately two (2) days; and

WHEREAS, this request will have no cost to PVWC and PVWC shall be fully indemnified.

NOW, THEREFORE, BE IT RESOLVED, by Passaic Valley Water Commission, in the County of Passaic, New Jersey:

1. That PVWC shall enter into a Research and Evaluation Agreement with Echologics, attached hereto as Exhibit A.
2. That appropriate officials and employees of the PVWC be and are hereby directed to perform such acts and execute such documents as are necessary to implement the terms and intentions of this

Resolution as set forth hereinabove.

RECORD OF COMMISSION VOTE ON FINAL PASSAGE

	AYE	NAY	ABSTAIN	ABSENT
SANCHEZ, R.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
COTTON, R.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
DEPADUA, C.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
KOLODZIEJ, J.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
LEVINE, J.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
VAN RENSALIER, R.	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
FRIEND, G.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>

Adopted at a meeting of Passaic Valley Water Commission.



President
GERALD FRIEND



Secretary
RUBY COTTON

This Resolution, when adopted, must remain in the custody of the Administrative Secretary.

CERTIFICATION

I, LOUIS AMODIO, Administrative Secretary of the Passaic Valley Water Commission in the County of Passaic, and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy thereof of the foregoing Resolution duly passed and adopted by a majority of a legal quorum of the full membership of the Passaic Valley Water Commission at its duly noticed and convened meeting of the said Commission on May 24, 2023.



LOUIS AMODIO
Administrative Secretary

RESEARCH AND EVALUATION AGREEMENT

This **Research and Evaluation Agreement** (this "Agreement") is entered into this 27th day of April, 2023 ("Effective Date"), by and between ECHOLOGICS, LLC, having a location at 1200 Abernathy Rd., NE, Suite 1200, Atlanta, GA 30328 ("Echologics"), and Passaic Valley Water Commission (PVWC), having a location at 1525 Main Ave, Clifton, NJ 07011, United States ("Participant").

WHEREAS, Echologics is engaged in research, development, and licensing of pipe condition assessment and water leak detection, and is continually exploring other applications for its proprietary technologies;

WHEREAS, Participant is a leading service provider in the water and sewerage industry; and

WHEREAS, Echologics desires to evaluate its pre-existing technology for the development of new technologies or purposes relating to testing of newly developed technology solutions and Participant has agreed to provide Echologics access to a portion of its water infrastructure for this purpose (the "Purpose").

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **ACCESS.** Participant agrees to grant Echologics access and use of its premises and infrastructure upon reasonable notice for the sole purpose of evaluating and developing its certain technology which is under development. The scope of access allowed to Echologics, as well as all other restrictions or limitations are set forth in Schedule 1 attached hereto ("Scope of Work").
2. **TERM.** The term of this Agreement shall commence upon the Effective Date and remain in effect through June 30, 2023, unless extended by written amendment to this Agreement.
3. **Rights and Ownership.** Echologics shall own all rights, title and interest, including but not limited to knowledge, copyright, patent, trademarks, trade secrets, and all other intellectual property rights in any and all deliverables, developed technologies, technical information, specifications, drawings, records, documentation, creative works, concepts, residual knowledge or data, (including, without limitation, any improvements of the foregoing) whether written, oral or otherwise which arise out of, relate to or result from this Agreement ("Work Product").
4. **Confidentiality:** Participant and Echologics may share confidential data and other information from time to time. Both parties agree to keep confidential, any information and data delivered or disclosed. Participant acknowledges that it may acquire information and material that is Echologics' confidential, proprietary or trade secret information. As used herein, "Echologics' Information" includes, but is not limited to, all information and documents disclosed by the Echologics, whether written or oral, in the course of this Agreement or in contemplation hereof including, without limitation, all specifications, drawings, sketches, schematics, models, samples, tools, algorithms, technical or business information, research and development, production and engineering processes, costs, profit and margin information, Echologics lists, marketing, production and future business plans and any information or materials of Echologics' agents, subcontractors or other third parties which is received from Echologics.

Participant will take all steps reasonably necessary to hold in trust and confidence the Echologics' Information and hereby agrees to hold Echologics' Information in strict confidence, not to disclose it to third parties or to use it, in any way, commercially or otherwise, other than as permitted under this Agreement. Participant will limit the disclosure of the Echologics' Information to employees with a need to know who: (i) have been advised of the proprietary nature thereof; and (ii) have been contractually obligated to maintain such confidentiality.

5. **Indemnification.** Echologics agrees to indemnify, defend, and hold Participant harmless from all third party causes of action, claims or demands (including the costs, expenses and reasonable attorneys' fees on account thereof) arising from or relating to personal injury, death, property damage and theft resulting from Echologics' negligence or acts or omissions.
6. **Disclosures.** Participant is hereby advised and cautioned that any research results disclosed to Participant by Echologics as a result of this Agreement should be regarded as EXPERIMENTAL. Echologics disclaims any responsibility for any actions taken, or not taken, or recommendations made by Participant based on the results disclosed in any report.
7. **Miscellaneous.** This Agreement shall be governed and construed in accordance with the laws of the State of New Jersey, without regard to conflict of laws principles. The parties submit to the exclusive jurisdiction of the courts of the State of New Jersey for the resolution of all conflicts hereunder or in connection with the formation of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

ECHOLOGICS, LLC	PASSAIC VALLEY WATER COMMISSION
By: _____	By: _____
Name: <u>Paul Murray</u>	Name: _____
Title: <u>Product Line Leader</u>	Title: _____

Schedule 1

Scope of Work

1. Overview.

Echologics (A division of Mueller Water Products) has developed a tool to identify if a water service line is lead material. The hardware and software have been developed, along with a data collection procedure. However, before the product is ready for full commercialization, we would like to expand experience with comparisons of ground truth and acoustic data with a USA based utility. This is to continue the development of our lead screening method procedures, continued improvement of algorithms, as appropriate, and provide a greater degree of confidence in the results.

Project Scope of work:

- 50 service pipes testing with known service pipe materials.
- A distribution of 20 copper (recently replaced or known), 15 galvanized (known or to be confirmed by alternative method within 1 month) and 15 lead (known or to be confirmed by alternative method within 1 month).
- Ideally, these would be a mix of different soil types which are known prior.
- Test in parallel 2/3 sensor arrangements.

For confirmation of pipe material, alternative methods that are considered for validation include any methods that expose a portion of the customer side buried service line.

Test Procedure:

The overall test procedure for each site is outlined below. Please note that this test procedure will likely be modified for research purposes.

1. Place sensor inside home on internal fitting such as a meter, stop tap or valve.
2. Place sensor outside home on external fitting such as a corporation valve.
3. Set up data acquisition receiver and computer.
4. Verify connectivity and RF radio strength.
5. Record a background file.
6. Induce noise excitation at nearby line valve or fire hydrant.
7. Record a file with noise excitation engaged.
8. Verify recording quality and repeat procedure if needed.
9. Record necessary field observations.
10. Tear down sensors and data acquisition equipment.

Echologics Scope of Work:

Echologics will supply LSL Screening Method test kits, laptop computers equipped with necessary software and two (2) trained field specialists to conduct the on-site testing. Echologics will coordinate with PVWC and/or Delegate to access properties and conduct testing. Echologics will provide deliverables noted below for review and acceptance by PVWC or Delegate.

PVWC or Delegate Scope of Work:

PVWC or Delegate will coordinate with Echologics and end customers for access to customer properties, as required for testing. PVWC or Delegate will provide at least one staff member on site to support customer relations during testing. PVWC or Delegate will provide valve keys, lifting keys and any other field equipment that may be required to access meter pits or curb stops for sensor attachment and valve chambers (i.e., hydrant isolation valve) for acoustic excitation.

2. Access Points.

PVWC or delegate will facilitate access to customer properties to enable Echologics to conduct the testing. Echologics will need to access the customer properties for up to 50 customers as well as access external meter box or curb stop for the same 50 properties. Echologics will also require access to appurtenance or fitting along the watermain connected to test properties.

3. Points of Contact / Planning.

PVWC or delegate will provide a person on site to facilitate customer relations and access to customer properties.

PVWC and Echologics will participate in planning meeting ahead of field work and follow up meeting upon the receipt of validation to discuss results, validations and potential next steps.

4. Deliverables.

Echologics will provide PVWC with a table of results including property and resulting material from Echologics testing. Following PVWC confirmation of material, Echologics will provide a brief summary report outlining testing data and results.

Following completion of the research, the PVWC would allow Mueller to use their name, image, and likeness in said publications. Final approval from Echologics, the CDM and PVWC would be needed before any outward facing collateral would be published.

EXHIBIT A

**PASSAIC VALLEY WATER COMMISSION
INTEROFFICE MEMORANDUM**

Date: May 24, 2023

To: Hon. Commissioners

From: L. Bresemann

C: Y. Brisman
J. Mueller
L. Amodio
P. Porcaro

Re: Request for the Commission to Authorize and Approve a Research and Evaluation Agreement for the Evaluation of Lead Service Line Identification Technologies (the "Project")

Summary

It is recommended that an agreement for the above-referenced Project be approved. This amendment would enable Echologics LLC ("Echologics") of Atlanta, Georgia to test service lines and verify whether they are lead, or not. This pilot study would provide valuable test data and information on the viability of this new technology and showcase PVWC as a utility willing to advance existing technologies. There is no cost associated with participating in the pilot study and the work would take place within the confines of our current lead service replacement program being managed by CDM Smith.

Background

Echologics (A division of Mueller Water Products) has developed a tool to identify if a water service line is lead material. The hardware and software have been developed, along with a data collection procedure. However, before the product is ready for full commercialization, we would like to expand experience with comparisons of ground truth and acoustic data with a USA based utility. This is to continue the development of our lead screening method procedures, continued improvement of algorithms, as appropriate, and provide a greater degree of confidence in the results.