



- » Design Expertise
- » Piloting Capabilities
- » Pressure Vessel Manufacturing
- » Media Supply
- » Field Services

END-TO-END WATER FILTRATION + TREATMENT SOLUTIONS

Ground Water | Surface Water | Waste Water

AqueoUS[®]VETS

Experienced. Proven. Reliable.

SOLVING TODAY'S WATER QUALITY CHALLENGES

AqueoUS Vets® (AV®) works with you to remove PFAS and other contaminants from your water supply with a technically superior line of filtration equipment. Our cutting-edge systems are made in America for a variety of treatment requirements and utilize the most effective and efficient media for your specific water quality.

What We Treat

- » Per- and Polyfluoroalkyl Substances (PFAS)
- » Arsenic
- » Hexavalent Chromium (Chrome-6)
- » Perchloroethylene / Trichloroethylene (PCE / TCE)
- » Total Organic Carbons (TOCs)
- » Volatile Organic Carbons (VOCs)



Who We Are

Established in 2015 by Army Corps Veterans with decades of experience, today AV operates as a vertically integrated solutions provider within the Bain Capital Double Impact Fund.

AV is responsible for more than 200 system installations and over 800 billion gallons of water treated.



COMPREHENSIVE WATER TREATMENT SOLUTIONS

Trusted Manufacturer for 10+ Years

What We Do

Proudly recognized nationwide for our work in the water remediation field, AqueoUS Vets is committed to providing every site with the system and media that will deliver the best results and the Lowest Cost of Ownership.

We achieve this by focusing on the 4 Tenets of Pressure Vessel Design to guide system design and fabrication. Combined with our Concept to Commission approach, this creates a streamlined process that improves project execution from design and procurement through fabrication, installation, and start-up.



4 TENETS OF PRESSURE VESSEL DESIGN

Our Guiding Principles, combined with the Four Tenets and a thorough analysis of the application and water quality, lead to the **Lowest Cost of Ownership**.

Long-Term Operation + Maintenance

- Simplify serviceability and provide safer access by designing for service
- » One homogenous lining to minimize lining repairs
 - » External underdrain removal for safety practices
 - » Media appurtenances can be removed and replaced exterior to the vessel



Corrosion Management

- Extend capital equipment life by engineering and manufacturing for corrosion control
- » NACE Standard PP0178-2007 and Coating Manufacturer's Recommendations
 - » Sharp edges ground to 1/8" min. radius

Media Optimization

- Optimize media costs through engineered inlet and underdrain design
- » Optimized inlet distributor design
 - » External ring header underdrain / collection
 - » CFD Modeling for design verification

Hydraulic Performance

- Reduce total head loss and pumping costs by optimizing water distribution and collection
- » Minimized Head Loss
 - » CRD Modeling for design verification

Pressure Vessel Design Comparison

AV Designs Exclusively with External Ring Headers

Description	External Ring Header	Internal Cone	Header Lateral
NACE Standard #RP0178-2007 Compliant	●	✗	●
Design Mitigates Risk of Corosion	●	✗	●
One Homogenous Lining	●	✗	●
Underdrain Fully Pressure Rate to the Vessel	●	✗	●
Media Optimized Design <i>Volume Beneath Top Nozzle</i>	●	✗	✗
Optimizes Pressure Drop & Pumping Costs	●	✗	✗
Prevents Confined Space Entry	●	✗	✗



MEDIA

Unbiased Media Selection Support is Important *Every Site is Different*

AV partners with owners to evaluate treatment technologies and media options under real-world conditions. We provide systems tailored to site-specific design and water chemistry.

Our modular pilot system design allows owners to test up to eight varieties of media and may be adjusted to ensure proper media exposure.

AV can help collect and analyze data to evaluate the effectiveness of different media – helping you make the best choice for treatment design.

Contaminants We Treat

Granular Activated Carbon (GAC)

Bituminous Coal Carbon
PFAS
1,23,-TCP
TCE
PCE
TOC

Coconut Carbon
1,23,-TCP
TCE
PCE

Ion Exchange Resin

PFAS
Chromium 6
Perchlorate



Novel Media

Bituminous Coal Carbon
PFAS
Granular Iron Oxide
Arsenic
Granular Titanium Oxide
Arsenic
Metal Removal

NSF / ANSI / CAN 61 Certified



PILOTS

The Right Media *Every Time*

Our design allows owners to test up to eight varieties of media within a single test period, ensuring your end goal is aligned with our capabilities. The column size may be adjusted to ensure proper media exposure regardless of flow rate.

Supplementary supports added to the column structure ensure that the skid will withstand weather events, allowing for site water to be tested in true exposure conditions.



Features



Simple
Setup



On-Site
Technical Support



Custom or
Standardized



Data
Analysis



Reliable
Results

FROM CONCEPT TO COMMISSION

AV Does it All

As the pure-play leader for PFAS and contaminants of emerging concern (CECs) removal, we pair our team of seasoned engineers and water industry veterans with an innovative, entrepreneurial approach to create game-changing solutions for our clients. From conceptual design to on-site commissioning, our turnkey offerings encompass a full range of capabilities.

Design
+ Engineering

Manufacturing

Installation

Training
+ Startup

Media Supply
+ Service



AV's in-house engineering team utilizes advanced generative design technology, and focuses on the four key tenets of pressure vessel design: corrosion control, hydraulic performance, media optimization, and long-term operation.



AqueoUS Vets manufactures highly specialized custom carbon-steel pressure vessels designed and fabricated to ASME Section VIII standards. Our Project Management and engineering teams provide project support to achieve your treatment and timeline goals.



Our Project Management and field service staff are highly trained experts, available to provide on-site support and troubleshooting services for each installation of our vessel systems, whether for GAC, IX, or a novel media.



Once installation is complete, our team will ensure the site staff responsible for the day-to-day operation of the system is trained on all aspects of normal operation and maintenance. To date, our team has been responsible for more than 600 system start-ups over 25 years.



We provide on-site maintenance and media exchange services, including; facilitating reactivation or disposal, technical support, system inspections, and a full line of media types to achieve your facility's water filtration goals.

MANUFACTURING

Our first facility was opened in Redding, CA in 2015. Since then, we have expanded our reach to include a second facility in Jacksonville, FL, opened first for vessel manufacturing in 1943, and a second-shift crew at both facilities to ensure that we are producing quality vessels on time and on spec.



SERVICES

Our Team Can Support the Installation and Maintenance of:

- » Prefiltration
- » Filtration
- » Systems and Pipe Installation

As part of our Concept to Commission ethos, we are committed to assisting with your vessel systems through the end of their usable life. We provide the following services:

- » Installation and Start-Up Assistance
- » Media Exchange Services
- » Equipment Maintenance
- » Equipment Refurbishment

CA General Engineering Class A Contractor
License #1089449 DIR #1000957029



Watch AV in Action
Installation at Klein
Water Treatment Plant
in Colorado



AQUEOUS VETS LOCATIONS

*Providing End-to-End Water Filtration
+ Treatment Solutions Across the U.S.*



AV Redding

16761 Clear Creek Rd
Redding, CA 96001



AV Jacksonville

5349 Hwy Ave
Jacksonville, FL 32254



Let's Talk



(925) 331-0572



info@aqueousvets.com



www.aqueousvets.com

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