

VVWRA wins statewide CWEA Awards

Agency captures Engineering Achievement Award while Latif Laari was named Supervisor of the Year



L-r, Keith Hopson, VP of WEF, David Wylie, VVWRA, Darron Poulsen, GM, VVWRA, Kristi Casteel, VVWRA, Latif Laari, VVWRA, and Chuck Greely, outgoing CWEA president.



Latif Laari, CWEA Supervisor of the Year

VVWRA captured two prestigious honors at the California Water Environment Association Annual Conference in Sacramento. The Renewable Natural Gas Project, which converts methane from sewer and food waste into natural gas that can be used in your home, won the Engineering Achievement Award. In addition, Environmental Compliance Manager Latif Laari won the CWEA award for Supervisor of the Year.

Earth Day Starts Now Celebration at VVWRA



The Earth Day Starts Now event at VVWRA's main plant in Victorville welcomed visitors with beautiful sunshine. This event was organized in partnership between VVWRA, Athens Services, Southwest Gas, and Anaergia, Inc. It was the first time that VVWRA has hosted an open house for the public. The visitors got the



chance to see firsthand how VVWRA recycles water, treats solids, and produces renewable natural gas. They also had the opportunity to take bus tours of VVWRA's plant and the operations at the nearby American Organics composting facility, with buses provided courtesy of Victor Valley Transit Authority. There were also activities for kids, informational booths, pizza and taco trucks, and a live broadcast with Coleen Quinn on Y-102 radio.



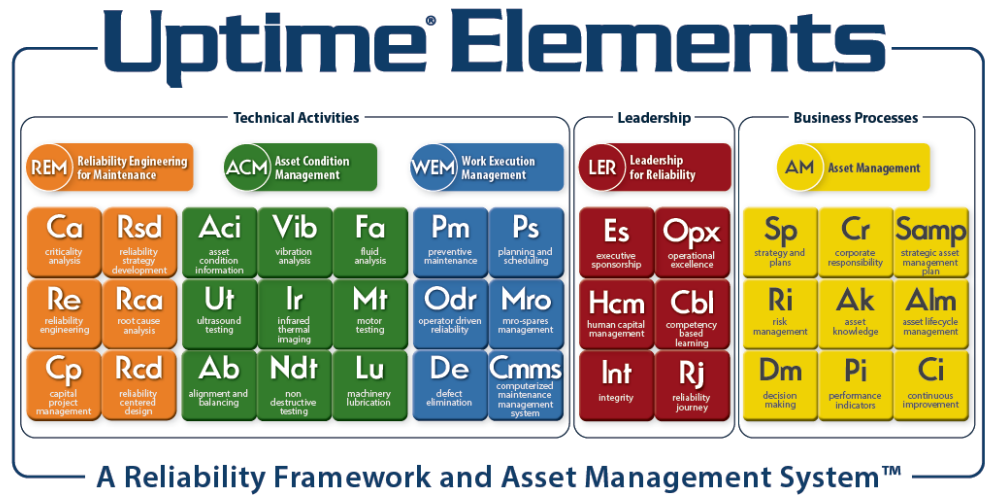


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Training Gives E & I New Skills and Insights

E&I staff recently attended a Certified Reliability Leader (CRL) Workshop as part of the RELIABILITY Conference® 2024. They learned about how to increase VWRA assets' reliability by using a world-recognized framework called the Reliability Framework and Asset Management System.

Uptime Elements, a framework designed for reliability professionals, is a crucial part of an asset performance and management system. It equips individuals with the knowledge to utilize condition-based maintenance strategies effectively, ensuring maximum uptime for each asset. The Uptime Elements Asset Management Timeline, a key feature of this system, tracks assets from their initial business needs analysis to the management of residual liabilities after an asset has ceased to perform as intended.



A main goal of the Reliability Framework and Asset Management System is for VWRA to implement a proactive maintenance approach.



Recently, Craig Taylor and Derek Evans attended technical training in Level 1 Thermography. This training showed both Craig and Derek the fundamentals of Infrared Thermography, how to accurately measure temperature, safely conduct inspections, and create basic reports for stakeholders. Upon certification, they'll have all the tools needed to begin their journey as safe, capable thermographers, unlocking the full potential of our investment in an infrared fluke camera that we recently purchased, and adding tremendous value to VWRA.

Purple Pipe

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VWRA Board of Commissioners

Scott Nassif - Town of Apple Valley
Larry Bird - City of Hesperia
Paul Cook - SB CSA 64 & 42
Debra Jones - City of Victorville



Around the plant

Congratulations!



Senior Operator Johnny Bustos earned his Grade V Wastewater Treatment Certification.



E & I Technician Derek Evans earned his Grade IV Certification.



Environmental Compliance Inspector Daniel Enriquez earned his Grade I certification.



Maintenance Mechanic-in-training Juan Alvarez uses a vactor truck to clean out a drain following a recent storm.

Welcome to VWRA



Sebastian Goforth
Utility Worker



Izzy Davalos
Operator-in-Training



Taking it to the Streets

VWVRA spreads the word about resource reuse and career opportunities



Japanese high school students visit VWVRA.

VWVRA is dedicated to raising awareness about the many valuable services we provide. We host a number of tours of our facilities through out the year. Our facility attracts interest both locally and internationally. Recent groups to tour our site include students from Granite Hills High School in Apple Valley and a contingent of Japanese exchange students. Although our name includes the term “wastewater,” we are actually a resource recovery facility. We treat wastewater and transform it into Title 22 recycled water that can be utilized for irrigation and other purposes. Additionally, we treat and dry biosolids, which can be reused as a nutrient-rich fertilizer. With the implementation of SB 1383, which mandates 75% of food waste diversion from landfills by 2025, we are treating food waste. The digestion of food and sewer waste results in the production of methane, which we convert into renewable natural gas. VWVRA’s main plant in Victorville spans more than 400 acres.



Granite Hills High School students tour VWVRA.



VWVRA’s David Wylie talking to students about career opportunities in the wastewater industry.



Students get a glimpse of the “outfall” where recycled water from VWVRA is returned to the Mojave River where it replenishes our aquifer.



Side Stream Project to Treat High Ammonia Effluent

The Victor Valley Wastewater Reclamation Authority (VWVRA) treats an average of 12 million gallons of wastewater per day, and those numbers are expected to increase by about 3 percent a year for the foreseeable future. A crucial part of the treatment process is breaking down and drying the biosolids.

VWVRA primarily dries the solids using the sun in large drying beds. However, in cooler months, it is necessary to remove extra water from the solids with a mechanical device known as a gravity belt thickener. The thickened solids can dry faster, but the water coming from those solids has very high ammonia levels. This high ammonia content would kill the microbes used in the biological wastewater treatment process, as stated by Brad Adams, Director of Operations and Maintenance.



In late 2023, construction began on the "Side Stream Project," which is designed to

lower the high ammonia levels so the water can be treated. As part of the project, chemicals (caustic soda) and oxygen will be added to the water to lower the ammonia levels. Several unused secondary clarifiers have been retrofitted with an aeration system that will oxygenate the water. Once the high ammonia effluent is treated, it will be safe to run through the VWVRA plant for traditional wastewater treatment. The project is expected to be up and running by early summer.



Tri-State Seminar
 NWEA
 CWEA
 AZ WATER
 EDUCATING WATER PROFESSIONALS

Viva TRI-STATE
 AUG. 5-8, 2024 | SOUTH POINT HOTEL & CASINO

Don't Gamble with Water



What's new at AC 24 CWEA Conference

AC24 in Sacramento was a huge success this year with 1614 attendees and 75 awards and recognitions handed out. As mention on the front page of the Purple Pipe, VVWRA won the state Engineering Achivement Award for our Renewable Natural Gas Program, and Environmental



VVWRA's David Wylie, Latif Laari, Kristi Casteel and Darron Poulsen stand in front of a large sewer pipe at Echo Water Resource Recovery Facility.

Compliance Manager Latif Laari won the Supervisor of the Year Award. Local sections donated \$15,000 to the Kirt Brooks scholarship fund which college students that are interested in pursuing a degree in the water environment industry. The conference also featured a number of classes touching on topics like safety, digester maintenance and cleaning and sewer spill response. Attendees also toured the massive Echo Water Resource Recovery Facility which provides wastewater treatment and recycled water for the Sacramento area.

The facility recently underwent a \$1.7 billion dollar expansion and treats 135 million gallons per day. The expanded tertiary treatment facility is now the second largest treatment plant of its kind in the nation, and the expansion project was among the largest public works projects in the Sacramento region's history.



CWEA members get a look at the massive underground gallery of piping at Echo Water.



Entrance to AC24.



FUN FACT: CWEA has gained nearly 600 members since January and now boasts 10,500 members statewide.



upcoming **EVENTS**

Tri-state Seminar

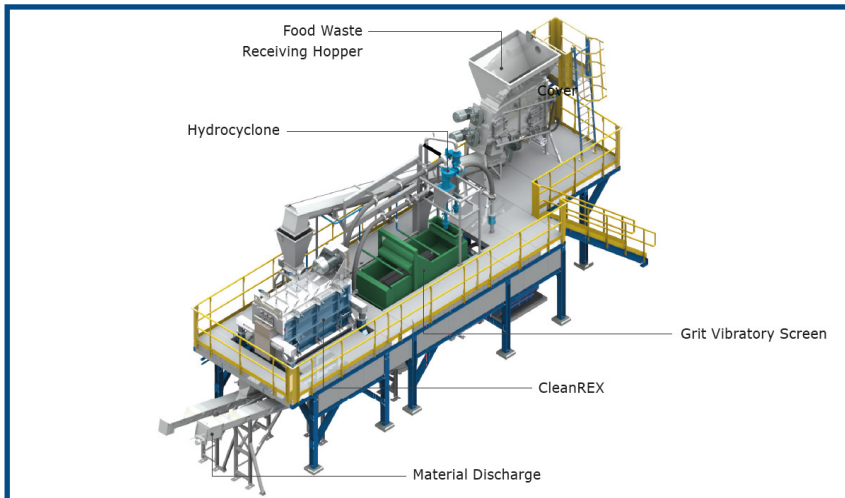
August 5-8
Las Vegas, NV

Ron Scriven Vendor Fair & Training

September 18th
Crestline, CA



Polisher added to ADM Delivery Skid



Anaergia GritREX grit removal system. (courtesy of Anaergia)

In addition to municipal sewer waste, VVWRA treats food waste or what is called ADM (anaerobically digested material). The food waste comes in a slurry from food manufacturers. The ADM often contains glass, plastic and other non-digestible waste. Anaergia, Inc., is installing a “polisher” that is designed to get rid of those items so they don’t damage our equipment.

*Anaergia’s **GritREX** grit removal system removes Fast Settling Inorganic Solids (FSINS) contaminants from organic waste streams to accumulating in digesters.

prevent them from damaging downstream equipment and Organic slurry is received by the GritREX and converted into a clean, polished organic slurry and a grit reject solids stream. The GritREX first uses a hydrocyclone to separate grit from the organic slurry and then a grit classifier with a shaftless screw to wash the grit and maximize the recovery of organics.

(*from Anaergia)



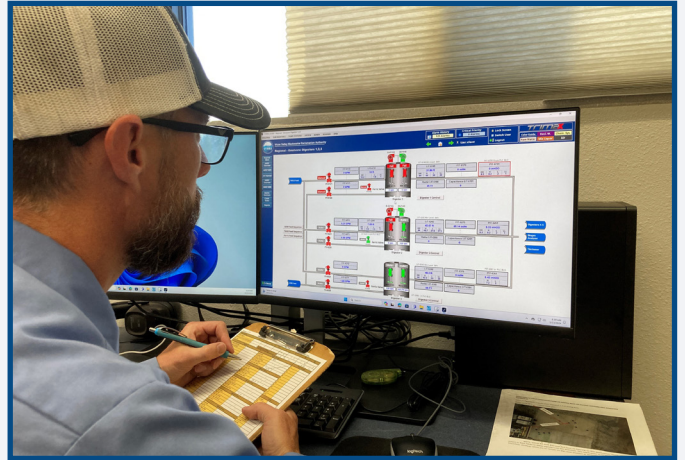
Nearly completed grit removal system.

The Back Side...

SCADA: Then and Now



SCADA at VVWRA in the 1980's.



Operator Danny Mullikin using SCADA in 2024.

Operating a wastewater treatment facility like VVWRA is complicated. In the 1980s, VVWRA relied on a SCADA system made up of a series of gauges, dials and switches to monitor and control operations. SCADA is an acronym for Supervisory Control and Data Acquisition and refers to a system to monitor and control industrial facilities. SCADA has evolved dramatically since those early days. Today, operators at VVWRA have access to a computerized SCADA system that shows them in real time how virtually every piece of equipment is operating. Using SCADA, operators can easily monitor the amount of flow, constituents in the water, the speed of pumps, and the efficiency of machinery. They use this information to make decisions and adjustments to the wastewater treatment process.

Cool Cat!



A large bobcat was recently spotted strolling near the outfall to Mojave River at VVWRA

Photo by James Carothers.

Johnny Wastewater reminds you to only flush the 3 P's

- Pee
- Poop
- Paper (toilet)

