# Volume V Fall 2015

# Taking Manholes into the Next Century & Beyond

Newly installed polymer manholes have a life cycle of 100 years



New polymer Armorock manhole installed near Interstate 15 and E St.

anholes are an intregral part of conveying wastewater, giving workers access to the buried pipeline for routine maintenance at different points along the way to the treatment plant. Manholes have traditionally been built with concrete, but corrosion has always been a problem. Over time, acid and bacteria produced by the wastewater can eat away at concrete, which then requires expensive rehabilitation or replacement. For example, the City of Las Vegas has budgeted \$680 million dollars to fix damaged manholes and pipes over the next five years.

ocally, VVWRA has a new tool to fight manhole corrosion. Geneva Polymer Products of Las Vegas recently replaced two damaged concrete manholes in Victorville (near I-15 and E St.) using their patented Armorock system. Armorock comes as precast pieces made from a polyester resin, acid resistant sand and aggregate. The result is a manhole that stands up to corrosion and is stronger than concrete. Mike Bussio of Geneva

Polymer said, "Our product comes with a 50 year warranty, but the life cycle of Armorock is actually 100 years." Bussio says the technology behind the Armorock product has been around for 50 years, but until recently it has been too



Old, damaged manhole.

expensive to compete with concrete. With the price dropping, Las Vegas and many Southern California agencies have begun turning to polymer manholes. VVWRA's Latif Laari said, "We are pleased with the Armorock manholes so far and look forward to possibly using them on future projects."



New GMI composite manhole cover

Vvwra has also installed about 100 GMI composite manhole covers that are 75% lighter than traditional metal covers. The lighter covers are safer for maintenance crews to work with and because they are a composite material, they have no value to scrap metal thieves.

# Purple Pipe

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#### **VVWRA Launches Target 99 Campaign**

VVVWRA is launching a new employee focused campaign, called Target 99, to encourage use of new operational software called Lucity. Lucity is an infrastructure management program that allows VVWRA to input virtually everything associated with the plant. From purchase orders to inventory to

repair requests, Lucity is able to manage all of VVWRA's daily operations in one place. Director of Administration Robert Coromina said, "Lucity gives us the tools to better manage our assets and determine the best use of our resources." The Target 99 campaign is aimed at getting all VVWRA employees excited about Lucity with the goal of 99% use and participation.

### **Upper Narrows Pipeline Nearing Completion**

Construction teams are in the final stages of completing the Upper Narrows Pipeline Replacement Project. A half mile tunnel from the Upper Mojave Narrows to Old Town Victorville was completed this Summer. Crews have been pulling huge pipes through the tunnel and those pipes will connect with a previously installed pipe at 7th and 'D' Street in Old Town. Crews are also installing a pipeline that goes underneath the railroad tracks that run through the Upper Narrows. The pipeline

story continues on Page 3



#### A Message from our General Manager

#### # UCity helps make us better!

our facility has seen a lot of mechanical and operational changes over the years. The difficulty is that our tracking of those changes has been rudimentary at best. An efficient and cost effective business relies on the quality of the information it has at its disposal to plan and manage its assets. VVWRA has begun using, Lucity, a new software solution that represents an important step forward to identify, track and manage our assets. Our goal is to enable finance, operations and maintenance to know when key equipment requires repair and replacement. Rather than operating blindly, Lucity will determine

when, where, how and why we maintain our equipment.

Why is this important? One of the frustrations I face is the constant variation in maintenance expense when budgeting. This leads to large swings in budgetary numbers and then trying to explain to our Member Agencies why we could not forecast those swings. I imagine a day when I can obtain a report from Lucity that will inform me of the types of repairs and replacements that will be required multiple years in to the future. It will also help reduce our tendency to focus only on the problems we have today and focus our efforts on predictive maintenance.

Our employees role in implementing Lucity is critical, after all if the information placed in to the program is poor quality so too will be the results. We have an opportunity to plan our workloads, manage our assets and be fiscally prudent. I will be working with management to ensure that each of us learns the program and uses it routinely, and that the information we input is complete and accurate. Finally, for both auditing purposes and for operational reliability, an accurate inventory will be performed. I thank each of you for your effort to make this effort a success!

#### **VVWRA Wins CWEA/DAMS Air Pack Derby**

VWRA swept the top two spots at the annual CWEA/ DAMS Air Pack Derby in Big Bear in mid-August. The Air Pack Derby is a simulated chlorine leak where teams must don their SCBA's (self contained breathing apparatus) and close the "leaking valve" as quickly as possible. The VVWRA team of Brad Adams and Bobby Hesse took first place at this years competition. This is the first time a VVWRA team has captured the air pack title. VVWRA GM Logan Olds and Xiwei Wang took second place followed by a team from Crestline. The Air Pack competition is the highlight of the day long event which also featured vendor demonstrations and seminars. The "trophy", which is the vellow pipe used in the competition, is now proudly displayed in the lobby of the VVWRA administration building. The plan is to paint the trophy in VVWRA colors before next years competition.



Brad Adams







(Celebrating their victory! I-r, VVWRA's Brad Adams, Bobby Hesse, Xiwei Wang and Logan Olds)

#### **VVWRA Employees attend Tri-state Conference**



Nearly two dozen VVWRA employees attended the annual Tri-state Seminar in Las Vegas in late September. The Tri-State Seminar is designed to educate water professionals and is put on by the California Water Environment Association (CWEA), the Nevada Water Environment Association (NWEA) and the Arizona Water Association. This year's event at the South Point Hotel featured over 300 exhibitors, more than 200 classes, 15 workshops and 3 tours. The classes touched on things like wastewater treatment, safety, maintenance and laboratory testing. Tri-state event gave VVWRA employees a chance to get up to 21 contact hours, while getting a hands on look at some of the latest products and developments in the wastewater field. It also is a great time for employees to talk with workers

from other plants and facilities to share tips and information. However, it was not all work and no play. The seminar also featured a pool party, bowling tournament and a number of vendor sponsored events.

# **VVWRA Board of Commissioners**



Russ Blewett
City of Hesperia



James N. Kennedy City of Victorville



Scott Nassif Town of Apple Valley



Jeffrey O. Rigney County of San Bernardino

#### **VVWRA GM Featured on Magazine Cover**



VVWRA GM Logan Olds appeared on the cover of the August edition of Municipal Sewer & Water magazine.

VWRA General Manager Logan Olds was featured on the cover of the August edition of Municipal Sewer & Water magazine, an industry publication. The article focuses on VVWRA's efforts to recycle wastewater while developing ways to sustain our plant operations through our Waste to Energy programs. The programs include capturing and conditioning biogas or methane, which is a byproduct of the sludge being treated in our anaerobic digesters. The biogas is used to power a pair of large 2G 800 kwh generators that provide a large percentage of the electricity that we use to operate the VVWRA plant. The program has been helped along greatly by the Omnivore technology from Anaergia Inc. Omnivore uses a proprietary sludge thickening process that dramatically increases biogas production. VVWRA is the only facility in North America to have the Omnivore process. The article also features photos of our staff in action and the Upper Narrows pipeline project. You can see the whole article at <a href="http://www.mswmag.com/ezine/2015/08/20">http://www.mswmag.com/ezine/2015/08/20</a>.

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# oppe ne



# **Upper Narrows Pipeline near Completion**



...replacement was necessary following a series of storms in December of 2010 that severely damaged a major pipepline and caused a large spill. A temporary pipeline has been in place since that accident. The new Pipeline Replacement Project includes a pair of 16'' pipes that will bring waste from Apple Valley and a larger pipe that will bring waste from Spring Valley Lake, Victorville and Hesperia. They join at the Upper Narrows and will flow into the large pipe installed in the long tunnel bored under C Street. Contractors hope to have the project completed by late October or early November.

### No Drugs America thanks VVWRA for Help



Frank Kelly (r) from No Drugs America presents VVWRA's David Wylie(l) and Kristi Casteel (c) with a certificate of recognition from Assemblyman Jay Obernolte for our support of the anti-drug program.



#### Around the Plant

# Toni Henning-- Employee of the Quarter



Human Resources Technician Toni Henning is VVWRA's Employee of the Quarter! Toni was given the award at our recent employee luncheon in recognition of her "dedication, hard work and commitment to excellence". Toni has been with VVWRA for nearly 9 years and says she "really likes helping people". Whether a newly hired employee or a long timer, Toni is always there to help with any HR or insurance related issue or question. Born in Los Angeles and raised in Ontario, Toni moved to the High Desert in 1991. Anyone who has been to Toni's office, knows that she is a big fan of Hello Kitty and enjoys collecting mementos. When not working at VVWRA, Toni enjoys spending time with her children and grandchildren. Congratulations Toni on being the Employee of the Quarter!

#### **VVWRA Promotions**



**Latif Laari** Regulatory Compliance & **Information Systems Supervisor** 



**Brad Adams** Sr. Operator



**Robert Coromina Director** of Administration



**Moises Castro Operator** (Grade 2 Cert.)



Salvador Carlos **Operator** 

#### Welcome Back!



We are so pleased to welcome back lab technician Cindy Myers who returns after undergoing successful open heart surgery!





Kyle Regis Septage Receiving



Johnny Bustos Operator in Training



Tyrese Powell Operator in Training



Administrative Aide



Benjamin Martin Mechanic in Training



Phayean McZeal Operator



Bradley Doneff Mechanic in Training



### Subregionals Update

VVWRA

Crews have begun work on the Apple Valley Subregional site at



Brewster Park. Heavy equiment operators began grading and excavating the site at the front of the park in mid-September. The start of the project had been delayed because it took longer than expected to move a large electrical vault in the center of the project area. The park remains open and crews are working hard to make up for some

of the lost time. During the delays, crews did begin work on a pair of percolation ponds. The ponds are located adjacent to the 13th, 14th, 15th and 16th fairways at the Apple Valley Golf Course. This is where the recycled water from the subregional will be delivered for use in irrigating the golf course. The project will save hundreds of thousands of gallons of potable drinking water every single day.





Two dozen members of the Hesperia Citizens Academy recently toured the site where the Hesperia Subregional Water Reclamation facility is being built. VVWRA GM Logan Olds led the tour giving them an up close look at construction of the facility that will eventually provide the city with up to one million gallons a day of reclaimed water. The city plans to build a ten mile pipeline that will initially deliver that water to the

Hesperia golf course where it will be used for irrigation. However, as infrastructure is created, other areas of the city, like parks and school, will also be able to tap into the reclaimed water supply. The Hesperia subregional is expected to be completed in early 2017. The Hesperia Citizens Academy is a free, 8 week session that offers city residents and business owners a chance to see the inner workings of local government and city projects.

# MOUNTAL SECTION OF CWEA

CWEA/DAMS will be holding a Certification Preparation Session at Barstow College on Friday, October 23. There will be four classrooms featuring sessions for collection systems, environmental compliance, laboratory analyst and mechanical technologist. Attendees can earn up to 7.2 CWEA contact hours. You can get the registration form at www. damsofcwea.org and download your study guide at CWEA.org/study. For more info, call Kody Thompkins at (760) 577-4585.

# **Confined Space Entry/Rescue Training**



Ryan Love, Mike Koncur and Mauricio Marin (I-r) attend to "victim" Mike Gouin during confined space entry/rescue training. This class was part of ongoing training and refresher classes that are offered to VVWRA employees in a variety of key areas throughout the year.



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# Ask Johnny Wastewater?

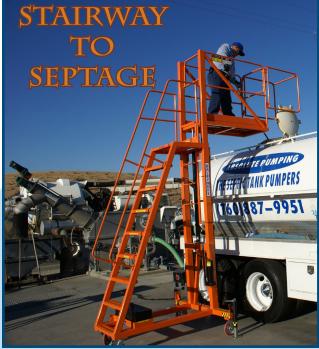


Q. How long does it take for wastewater to reach the VVWRA plant after I flush my toilet?

-- Dennis, Apple Valley

A. Hi Dennis! There are a couple different answers to that question. If your home is connected to the sewer system, waste generally takes about 24 hours to reach our plant after you flush. The time can vary depending on where you live. However, most of the high desert is not connected to the sewer system. About two thirds of residents living in the Victor Valley are connected to septic tanks. In that case, the waste would go directly to your septic tank after you flush. It would only arrive here at VVWRA after a local waste hauler pumps out your septic tank and brings it to our plant. (see the story on this page about the Stairway to Septage) Most septic tanks should be pumped every three to five -Johnny





VVWRA's Moises Castro uses the new septage ladder to take wastewater samples from a truck for testing.

all it the Stairway to Septage. VVWRA recently purchased an adjustable tank top lift for use in our septage receiving area. The lift from Global Industrial features a nine step ladder and a 48" x 24" platform. The lift can be raised to 13' 8" and is used by the VVWRA staff to take samples of incoming loads. The samples are tested for PH and conductivity. Previously, workers had to climb up on the truck to take samples. "Safety is extremely important at VVWRA", said EC/Safety Aide Daniel Enriquez. "This lift provides another layer of safety for our employees and the truck drivers visiting our plant." VVWRA Operator Moises Castro agrees by saying, "The ladder has made the septage receiving job much safer."

#### **VIOLINS AND WASTEWATER?**



It's not everyday you see violinists and young ladies in evening gowns at a wastewater plant. But that's exactly what happened recently on a hot August morning at VVWRA. A group of local college students (I-r, Diana del Castillo, Tanya Pina and Tiffany Phan) made a visit as part of an international scavenger hunt called GISHWHES. The scavenger hunt asked participants to tour a wastewater plant "dressed in formal attire with an accompanying violinist." VVWRA was happy to help. The young ladies played several tunes including "My Heart Goes On" from Titanic.

#### **Please Don't Flush!**

Please don't flush prescription drugs down the toilet! Treatment plants like VVWRA are not designed to filter prescription and overthe-counter drugs. If flushed, the drugs can cause environmental damage, so it's important to dispose of these things properly. Drugs can be taken to local household hazardous waste disposal sites.

