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FINAL IMPRESSIONS OF AFRICA BY LARRY OLSON, Ph.D., PG 9

JOURNAL OF

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FOCUS ON: LIQUID ENVIRONMENTAL SOLUTIONS



Bob Goldberg Vice President, Industrial Services Liquid Environmental Solutions

This article is one of a series of "FOCUS ON" articles featuring Arizona businesses. Tom Curry, Arizona environmental management professional and a frequent guest interviewer for the Journal, speaks with our guest Bob Goldberg, Vice President, Industrial Services, of Liquid Environmental Solutions.

TOM CURRY:

Bob, the Journal published a very good article about Liquid Environmental Solutions in the December/January 2006/7 issue that had a number of photographs and explained a lot about what LES was doing back then. My first question is for those readers who may not have read that particular article -- can you give a quick overview of what your company does, and maybe explain what's happened in the past seven years since that article, and how have you expanded? BOB GOLDBERG:

Sure Tom, I'll be happy to. Liquid Environmental Solutions is what we call "the nation's most trusted provider of industrial non-hazardous waste and organic waste solutions". Our mission when we developed the company was to build a national platform to be able to service customers coast to coast in those two categories. Back in 2006, as noted in that article, we had six facilities. Today we operate 14 wastewater pretreatment plants scattered across the country with plans to continue to expand and grow our geography and our reach throughout the country.



TOM:

You were, I won't say centralized, but you were in a select few states back in 2006. You have picked up a few more states, I'm sure, having looked at your website. One of the issues that I was wondering about, since you're operating in so many locations, is how do you deal with the different regulations at various locales, what kind of hurdles you have for your different service areas?

BOB:

A good question. Today we operate 26 collection branches throughout the country. We have local management at each of those locations. We service, on the grease side of our business, all 48 states, excluding Hawaii and Alaska. To answer your question, on the regulatory side, we have a high level of expertise internally; we have a staff, including an attorney that basically scrubs for various changes in regulations throughout the country; not only on a state level but on



"Protecting your business is our business" Liquid Environmental Solutions is a comprehensive provider of non-hazardous liquid waste collection, transportation, treatment, and recycling services with an industry leading record of compliance, safety, and customer service.

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a city level, because on a city to city basis regulations can be different.

We keep our customers in compliance because we have that in-house knowledge and dedicated resources to make sure that we understand what the regulations are, communicating any changes to our customers and how it might impact them, and then servicing accordingly.

Том:

You've mentioned in the earlier article and on your website the three pillars your company is built on: Commitment to the Environment, Customer Service, and Safety and Compliance. I noticed that you didn't say anything about profit. You're not a non-profit, I know you work for your share holders or your company owners. How does that work into being in an industry where you're looking at competing with other haulers or other entities

BOB:

The company was founded on the those pillars. They are the core operating principles of our company. Our belief is that when we are successful in these three areas, customer service, committment to the environment, and compliance and safety, that's how we will grow our revenue and our profit in our organization. We do these 3 things very well, and know our customers value them and will continue to do business with us. So on the customer service side, as an example, we survey our customers, and ask them to rank us from excellent to poor. In 2013, in our first quarter doing business, we asked over 4000 customers that we serviced in that time period how we rank. 94.5% of our customers told us that we ranked "excellent", 5.5% told us "good", 0% "fair" and 0% in the "poor" category. So that is a good example of how we use the 3 pillars to improve customer service.

том:

That leads us into the discussion on sustainability. How do you provide for your customer sustainability, other than just the disposal regulations keeping them in compliance.

BOB:

Sustainability is very important to our customers, and we track it on a monthly basis. In 2012, we examined the number of gallons coming in--we brought in about 300,000,000 gallons into our plants, either through our collection arms or fleet, and then processed it accordingly. And of that total, 90.6% was beneficially reused. We categorize beneficial reuse as either recycling the water, turning the waste to energy, composting the waste, or turning the waste into fuel. So when you look at that kind of statistic it equates to over 270 olympic-sized swimming pools. We think that's pretty significant and we're proud of the fact that we are not only providing a great service on the front end, but also providing our customers sustainability and a committment to the environment on the back end.

Том:

During the 7 years that have passed since that first article, my "flip phone" went to a "blackberry", and now its a "smart phone". Technology advances. So, ... is there "an app" for LES?

BOB:

There is not an app for LES. But, in the last 7 years there are a number of technological advances that we have invested in to better serve our customers. For example, we use centralized computerized routing for our entire fleet throughout the country and we feed that routing on a daily basis to our local branches to execute against. If an order comes in after the routing has been completed our local transportation managers at each site place that customer into the route accordingly. So centralized routing is one technology that we are using to help guide us in driving our business more efficiently. Again in the transportation category, we put DriveCam on our entire fleet. DriveCam is a coaching tool that we use for our drivers. Basically, if you're not familiar with that technology, it is a camera that gets triggered anytime an event occurs. An event could be slamming on the brakes, getting hit, a sudden turn, speeding, etc. A camera on the truck has views both inside and outside so if one of those events were to occur the camera goes on to record the event. From a business perspective we are in the process of changing platforms to upgrade our systems, and that will impact major business items such as reporting, billing, financials, etc. So those are some of the technological advances that we have invested in as a company.

TOM:

You mentioned some of the beneficial uses--that you are trying to make sure that all of your processing artifacts were beneficially used. Are you at all involved in generating alternative fuels or feedstock for people making alt fuels, and do you have any new wastestream processes coming on board?

BOB:

Good question. We have employed some new technologies at our plant that allow us to do a better job at capturing oils and brown greases, and we sell these back into the marketplace. When I say oil, this is oil coming off of waste streams such as oily water which could come from a car dealership, a quick lube type customer, or an industrial manufacturer where there is an introduction of some type of lubricant or oil. That oil is all reclaimable and recaptured in our system and we sell that back into the market place. After that it is often sold to re-refineries where the oil is basically turned back to its original state. On the brown grease side, we re-claim the brown grease and sell it back into the market place, where other folks then turn it into biodiesel and other alternative fuels. Those are just 2 examples of what we do. TOM:

There is a new hot topic--the new interest in fracturing fluids from the oil industry. Are you guys, since you're pretty much nation-wide, involved in processing those waste waters?

BOB:

We have chosen not to be involved. That's a fairly intensive, resourse driven business. In other words you have to have a lot of front-end equipment for the fracking industry and we have just chosen not to invest in that sector at this time.

TOM:

What is your future area of participation in, say, industrial waste, or is there anything on the horizon now that you want to mention? **BOB**:

Yes, we are going to continue to grow this company both organically and through aquisitions. We are going to stay in our niche--that non-hazardous niche--providing disposal and transportation services. We like that niche and we think our customers like it as well. Their waste does not get comingled with hazardous waste or hazardous wastestreams. And we are going to continue to expand our number of plants, service, and geography.

Том:

You have answered a lot of what I wanted to know about--is there anything in the arena of your industry or company that you would like to bring forth that I didn't ask?

BOB:

I think the types of waste that we handle might be of interest. We talked a little about oily waters coming from oil water separators, we also handle remediation waters, organic liquid, metal bearing waste, we handle California non-RCRA waste, we handle waste coming off *Continued on next page*

JOURNAL OF Environmental Management

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FROM THE EDITOR



There is a lot packed into this issue of the Journal! First, Dr. Larry Olson's moving account of his and his wife's trip to Africa--his column and photos (see page 8) put a very human face on the hardships and the hopes of life in the common villages of Zimbabwe. Then read, "April 22, 1970: A History Lesson"

(see page 7) for Dr. Hild's detailed review of America's environmental story, how it started, and the key players. Tom Curry joins us again in this issue to interview Bob Goldberg, Vice President, Industrial Services at Liquid Environmental Solutions (page 4). Then find out where some of your friends in the environmental community are today (see page 11, under Newsbriefs) to see 'who' is now working 'where'.

Thank you for reading the Journal--and if you enjoy receiving your subscription, please consider calling at least one advertiser this month and tell them you saw their advertisement in the Journal. Thank you!

Sincerely,

JimThrush, M.S. Environmental Management Editor & Publisher 480-422-4430 x42

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FOCUS ON: LIQUID ENVIRONMENTAL SOLUTIONS

CONTINUED FROM PREVIOUS PAGE

of chemical plants, we handle all kinds of industrial and treatment type sludges, ... leachate coming off of the landfills, coolants, any kind of tank cleaning wash waters or process waters, latex waters, we handle it in drums, totes, rail, and via truck. A broad range of non-hazardous type waste streams via transportation and container methodologies. We own and operate our own labs, and we do our own sampling and profiling on the waste streams coming in. TOM:

That is a prodigious menu of areas of service and different types of waste streams. Even though they all may be water based or similiarly designed, it's quite a profiling nightmare for a company to try to make sure that you are dealing with apples and not oranges.

BOB:

Right, and that is why our customers come to us. If it was easy, anybody could do it. Our sales and customer service team supports our customers to help facilitate the process to make it easy to do business with us. TOM:

Well, Bob, I thank you for your time and the information and hope that the readers who may not be using you will take a look at your company and take the opportunity to let you guys demonstrate your abilities and your customer service to them.

BOB:

Thank you Tom, I appreciate it.

Bob Goldberg is Vice President of Industrial Services, Liquid Environmental Solutions. Bob joined LES in 2011 and is responsible for managing the industrial services group that focuses on industrial customers' transportation and collection of CWT-regulated waste streams, as well as third party plant customers. Prior to joining LES, he was with Safety-Kleen and served in progressively more senior roles including large industrial account sales, branch, district, market and regional sales and operations management in California, Pacific Northwest and Western Canada. In 2007, Bob moved to Atlanta to become the Vice President of Field Marketing for the East Group including the management of the key and strategic account sales teams. In addition, Mr. Goldberg played a strategic leadership role in implementing a new company-wide business information systems and the redesign of the branch sales and service delivery model that is in place today. Bob Goldberg has over 22 years experience in the waste recycling and environmental industry and holds a Bachelor of Science degree in Biochemistry from the University of California at Riverside. He can be contacted at 214-524-6116 or at bob.goldberg@liquidenviro.com. LES maintains a website at www.liquidenviro.com.

Tom Curry is a frequent guest interviewer for the Journal and guest host interviewer for several episodes of EMTV (www.environmentalmanagement.tv). Tom is a former ADEQ WQARF Project Manager and RCRA Compliance Officer. Tom has a BS in Geology, and a Masters in Environmental Management. He has worked in the Arizona environmental arena for nearly 25 years, currently as the Supervisor of the Environmental Department for the Central Arizona Project. Tom can be reached at 623-869-2353 or by email at tcurry@cap-az.com.





SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

Nicholas R. Hild, PhD.

APRIL 22, 1970: A HISTORY LESSON

B arth Day was April 22nd and if you didn't participate in one or another of the various activities that day, shame on you! This Earth Day was the 43rd consecutive year that our nation paused to pay reverence to our environment and to the many thousands of people that made our environment a priority in their lives and in yours---<u>you</u> being the children's, children of those who made the environment a priority back in those early days---it was those pioneers of the "movement" that initiated what we have today and EH&S professionals need to know that history in order to appreciate how much has been accomplished because a handful of people found a way to bring our nation's environmental problems into the light.

The early spring of 1970 found a nation growing weary of a war that had pretty much dominated the news every day since Richard Nixon was elected President on a platform that, in part, guaranteed he would end the war and bring our boys home. It certainly seemed an unlikely time to try to focus on the nation's rapidly deteriorating air and surface waters. But, it turned out that it was exactly the right time to throw another 'social injustice' into the mix of war casualties and poverty issues that were making headlines.

Daily protest demonstrations were being held on college campus' across the country and to rally the necessary numbers of people that would make a splash on the evening news, they included all the (then) splinter groups like gay rights groups, Black Power organizations, as well as various so-called '*environmental*' groups (i.e. realize, at that time in 1970, the ink had not yet dried on the Environmental Quality Act and the federal EPA was still looking for its first administrator)---so, it was really the Vietnam protest demonstrations in 1969 and 1970 that led to an awareness of 'social' issues like war and poverty and ghettos and the 1968 race riots in Pittsburg, Detroit, and seven blocks from the White House on 14th Street in Washington, D.C.---but not issues like how polluted our nation's rivers and air were--- that formed the basis for a national consensus that something needed to be done to raise awareness about how badly polluted our environment had become.

In February of 1970, in an unprecedented bipartisan coup, Senator Nelson Gaylord persuaded conservation-minded Senator Pete McCloskey to be his co-chair and asked political activist Denis Hayes to coordinate a nationwide effort to hold a national teach-in day for the environment---what then was dubbed, 'Earth Day'--- and he got Walter Cronkite to announce it on the most-watched network evening news program, weeks in advance. Hayes built a staff of more than 100 'volunteers' and in what was probably the first national grass-roots environmental effort ever, sent them out to campus' across the country to rally all those splinter groups and to put up fliers and post announcements in campus papers as well as making appearances on local TV stations as public service announcements. With no cell phones or internet, using mass media strategies and the help of volunteers was a herculean task but the only way to make the first Earth Day a national success in such a short time.

Gaylord himself years later noted that the bipartisan support from Republicans and Democrats, rich and poor, union workers and farmers and labor leaders from all parts of the country came together and achieved a consensus on the notion that our environment needed a voice. *"It was a gamble,"* Gaylord noted, *"but it worked."* As it turned out, it was exactly the right time to capitalize on the student anti-war movement and infuse that energy with an emerging public consciousness about pollution and make environmental protection a national priority that could no longer be ignored.

Even President Nixon was forced to join in. After all, how could he not 'buy in' to Earth Day, when he had already been referring to himself as the '*environmental President*' whenever he talked about the Environmental Quality Act he got passed. And, had he not already made the EPA an agency of the federal government whose sole task it was (is), to make sure that the US and all its possessions would clean up the water and get rid of all the air pollution (i.e. more history here: at that time, no one gave any thought to solid or hazardous waste or to our groundwater/drinking water, but that's a history lesson for another time)---and so it was that President Nixon was heard to say that he 'supported' the idea of a national Earth Day and that everyone should attend an Earth Day teach-in to learn what could be done to get our polluted waters and air cleaned up.

Across the nation, in city parks and public spaces and at more than 500 universities and colleges, 20 million people participated in the first Earth Day teach-ins and workshops. Just from that day's learning experiences and workshops, people across the nation had a renewed appreciation for how our environment was being abused and many who participated went on to choose a career path that would provide them with the skills and tools to become practicing environmental professionals. (Note: one of those was a Mechanical Engineering student who went to graduate school to become an Environmental Engineer and later, founded the ETM Program at ASU).

And, so it is today, that you---the children's, children of those many people who helped plan and who participated in those Earth Day teach-ins on April 22^{nd} , 1970 can look back now and have an appreciation for those environmental professionals who set the bar for how our nation's environment would take an equal place in our national list of priorities. It was that first Earth Day that set people like me on a career path to become environmental engineers and environmental lawyers, and yes, even 'sustainability scientists' from over a hundred disciplinary backgrounds, to lobby for and get legislation passed (like the Air Pollution Control Act(s), the Water Quality Act(s), the Solid and Hazardous Waste Act(s), EPCRA, RCRA, and all the other legislative alphabet soup with which we have come to 'manage' our environmental priorities)

Fast forward to today's Earth Day focus that has shifted from just getting the word, '*environment*' into the common lexicon with a concerted effort launched in the '70s and '80s to clean up our nation's polluted waterways and ambient air---fast forward to '*climate change*' and you get forty years of history that should be a roadmap for how to get climate change deniers and their lobbyists to see the error of their ways before greenhouse gas becomes the global disaster that our waterways were half a century ago.

And, for your homework: just as those first Earth Day participants have done for you, pass it on to your children's, children's, children.

Nicholas R. Hild, PhD., is an Emeritus Professor and Sustainability Scientist in the College of Technology and Innovation and the founder of the Environmental Technology Management program at Arizona State University. Dr. Hild has extensive industrial environmental engineering and management experience as well as continuing to be a consulting environmental engineer for the past 40+ years. Reach him at www.worldsleadingexpert.com or email at drnick@asu.edu.



Larry Olson, PhD.

IT'S ALL ABOUT CHEMISTRY

FINAL IMPRESSIONS OF AFRICA

Sometimes when you travel you are so far removed from your normal day to day activities that it seems like a different world. Yet when you return it doesn't take long to get so caught up in your routine that it hardly seems possible that a week ago you were sitting in a mud brick hut with a straw roof and a fire smoldering under a pot of beans. If it weren't for the pictures, it might have all been just my imagination.

Following our visit to the AIDS clinic I described in the last column, my wife and I were incredibly fortunate to be able to visit three of

the clients in their homes in a rural area outside of Mutare, Zimbabwe. The village chief was waiting to greet us at the first house and each of the families was excited and proud to share some of their life with us.

I've been teaching for years about the health issues created by burning biomass for indoor heating and cooking. But I couldn't convey the sense of smell from burning wood and a little cow dung to drive away mosquitoes that permeates a cooking hut where families typically spend hours each day,

especially when it is cold. I'll remember that odor, the dim light making others just barely visible, and a chicken walking in the door to see what all the fuss was about for the rest of my life. It was easy to imagine the family spending many quiet evenings here just talking – no TV, no cell phone, no electricity or running water.

It seems to us that it would be impossible to live on \$1 a day. But

that is about all the cash that each of these families earned from selling some chickens, rabbits, tobacco or vegetables. Yet they were in control of much of their lives. They grew their own food, built their own homes and dug their own wells. They needed medicines (especially for AIDS, malaria, diabetes or a myriad of other diseases), malaria bed nets, and some proper seed for next year's crops. They needed money for the fees charged to send their children to school and the required uniforms. But for the most



part they were self sufficient and able to provide for their families without relying on others.

I don't understand the land tenure system in Zimbabwe, so I'm not sure how these families were allocated the land that they were on. I think it has much to do with the village system. Approximately 30



families or so make up a village although each of these homes was not in sight of another house, so the village was very spread out.



The economy in Zimbabwe virtually collapsed five years ago. Inflation reached 100,000% with the result that the Zimbabwe currency was abandoned in favor of the U.S. dollar. That has stopped the runaway inflation, but left prices out of the reach of many ordinary citizens. Unemployment in the cap-

ital city of Harare is 85-90%. The result is that crime is rampant. In the cities, almost every window was barred and doors were padlocked. Even in the rural homes we visited, the windows in the cooking hut were small so no one could break in. A generation of talented professionals was lost during this time as they fled to other countries where they could earn a living.

In many ways it is not easy to live in Zimbabwe today, but we came away not depressed with the situation, but with great admiration for the people, especially those who invited us into their homes and shared a moment of their lives with us.



Larry Olson, PhD., Associate Professor, Arizona State University Environmental Technology Management Program. Dr. Olson holds a Ph.D. in Chemistry from the University of Pennsylvania, and is an environmental chemist with interests in remediation technologies and international environmental management. He can be reached at 480-727-1499, or by email at Larry.Olson@asu.edu

SSOCIATIONS PAGES The Journal of Environmental Management Arizona invites environmental, health and/or safety organizations in

Arizona to contribute news articles about their associations. Contact the editor at 480-422-4430 x42.



The Arizona Chamber of Commerce and Industry will hold its 30th Annual Classic Golf Tournament at Lookout Mountain Golf Resort at The Pointe Tapatio Cliffs

of Commerce and Industry WWW.AZCHAMBER.COM Resort on May 17th. In

addition, The Arizona Manufacturers Council's 2013 Manufacturer of the Year Summit and Awards Luncheon will be held on May 31st at the Hyatt Regency Downtown Phoenix Hotel. This event features leading-edge and innovative manufacturers in the State of Arizona and includes presentations and a trade show focused on Manufacturing excellence in the State. Additional information on both of these events can be found under Events at www.azchamber.com.

The Arizona Chamber and Manufacturers Council continue to host monthly environment breakfast meet-

ings on the second Wed. of each month at the Sheraton Phoenix Airport Hotel. Additional information can be found on the Arizona Chamber's web page at Environment www.azchamber.com.



Each year since 2004, the Arizona Hydrological Society (AHS) and Central Arizona Project (CAP) have awarded monetary prizes to selected science projects in water, environmental and hydrologic sciences at the Arizona Science and Engineering Fair. The 2013 projects were very impressive and reflect a lot of hard work and dedication by the students. Our volunteer AHS judges, Paul Plato of Clear Creek Associates, DeAnne Rietz of SWCA, and Derek McGregor of Freeport-McMoran, handed out five awards to water projects in both the elementary and high school divisions.

HYDROLOGICAL

The AHS is soliciting abstracts for papers and posters to be presented at the AHS 26th Annual Symposium scheduled for September 18-21, 2013 at the Doubletree Reid Park Hotel in Tucson, Arizona. The AHS Symposium is a premier event in the Southwest for hydrology and water resources science, engineering, and public policy. AHS is soliciting descriptions of projects and research from hydrologists, geologists, engineers, plan-

ners, water policy and legal professionals, and teachers. Also the Symposium Registration is open! Please visit ahssymposium.org/2013/ for addition information and instructions on submitting abstracts and signing Executive up as a sponsor.



The Arizona Association of Environmental Professionals (AZAEP) invites you to our May 28th, 2013, meeting at Grimaldi's in Scottsdale from 6 to 8 p.m. The speaker will be Misty Klann, ADOT Trans-

www.AZAEP.org portation Planner and Tribal Liaison, who will discuss implementation of the ADOT Tribal Transportation Consultation Policy. Please RSVP to AZAEP@azaep.org no later than noon on Monday, May 27 so we have an accurate head-count for the dinner. The cost for attending the monthly meetings is \$15 for members and \$20 for non-members, which includes dinner. To become a member, join our distribution list and to learn more about AZAEP, please visit our new website at azaep.org!

Save the Dates: The June 25, 2013 monthly meeting will be held in Tucson (see our website for details). The July 23rd meeting will be in Scottsdale. The speaker will be Jennie Curé who will discuss her research on reclamation of agricultural fields using Native grass

crop production in the lower San Pedro watershed. AZAEP is the

state chapter of the National Association of Environmental Mariella, Ph.D. Vice President Professionals (NAEP).



SOUTHERN ARIZONA AMERICAN SOCIETY OF SAFETY ENGINEERS The Southern Arizona Chapter

Patricia

of the American Society of Safety Engineers (ASSE) has been

busy this spring with industrial tours - two in Pima County and one in Maricopa County. Members toured the Raytheon Missile Systems facility in January, the Caterpillar Proving Grounds in April, and the Award winning Water Treatment facility in Phoenix in March. The Chapter awards banquet is coming up Friday May 17. The banquet is tentatively scheduled for a tour and dinner at the Franklin Museum in Tucson. The awards include Safety Professional of the Year, and Community Safety Leadership which is awarded to a company or organization that demonstrates exceptional safety leadership in furthering the safety and health in the workplace or the community at large The Southern Arizona Safety Council will meet again May 21st (0830 to noon). There is one more OSHA 500 course being offered this spring (May 20-23). And, while the general membership will take a hiatus for the summer, Board members will continue working on the new Student Section at the U of A; support-

ing legislation on the ban on texting while driving; and developing plans for the fall. For more information, please visit our web site - http:southaz. John Roads asse.org.



Secretary

By the time you read this, we would have raised over \$2400 for our foundation endowment for the William C. Ray CIH, CSP scholarship. We have had a very American Society of successful year and there are a

Safety Engineers ton of people that have helped to make that happen. Too many to

list here, but to name just a few: Ryan Oughterson, Wayne Carroll, Melissa Schmaltz, Rick Prince, Norm Watkins, Mary Bobbitt, David Bellmont, Harold

Gribow, Donna Seniuk, Janet Gal-lup, Stephanie Steinberger, Jackie Ruggles, Gino Ruggles, Gino Matteoni, Jitu Patel and many others! I want to take this time to thank all of them!





WWW.SAEMS.ORG

The March luncheon was held at Hotel Tucson. We are once again charging full speed into the RCRA seminar. The

seminar will be held at the Holiday Palo Verde on Tucson on Thursday, May 9th. Topics will include waste minimization, compliance audits and inspections, RCRA basics and waste division update from Laura Malone with ADEQ. Our April Highway clean-up was held Saturday, November 13. Thanks to our amazing volunteers. SAEMS has recently awarded \$3,000 in education grants and sponsorships to the Tucson Earth Day Festival and Tucson Elementary schools in

conjunction with Tucson Clean and Beautiful and the Arizona Native Plant Society. Stay tuned for project capsules! If you are interested in membership or upcoming SAEMS events please Heather visit our website at www. Shoemaker President saems.org/.



ARIZONA ENVIRONMENTAL **STRATEGIC** ALLIANCE

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lliance members have been very active! Approxi-2nd Biennial AQ Luncheon in Ahwatukee on March 28th. Bill Wiley, Director of Maricopa County AQ Dept., and Don Gabrielson, Director of Pinal County AQ Dept., discussed current air quality issues of concern to businesses and residents. The following week, at the Gatekeeper Regulatory Roundup on April 2nd, Alliance Member Greg Bopp, Honeywell Aerospace, spoke in a break-out session on the "Practical Applications of EMS - Pillars of Sustainability". On April 9th, Alliance Members and Advisory Councilors gathered for a half-day session to develop Alliance near-term and long-term organizational strategy.

For information on the Alliance or on Alliance activities, including our Environmental Technical Tours, please contact us at 480-422-7392 Matt Conway or visit our website.

NTAL PROFESSO



EPAZ is looking for a few good men & women! Election time will be upon us very soon for the 2013 - 2015 term. If you would like to nominate yourself or

AR ZO NA someone you know for a position on our board of directors, please contact Mannie Carpenter at mcarpenter@jbrenv.com. Upcoming Events: May 9th luncheon will feature a presentation by Ian Bingham from ADEQ regarding "ADEQ's Strategic Plan". EPAZ will host a mixer on May 30th at the Thirsty Lion Pub & Grill (Tempe Marketplace).

EPAZ holds monthly luncheon meetings on the second Thursday of the month from 11:30 AM to 1:00 PM at the SRP PERA Club. EPAZ also hosts a

networking mixer on the last Thursday of the month. For event details and reservations please visit our website at www. epaz.org.



Continued on page 11



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News Briefs

ADEQ REACHES MILESTONE WITH COMPLETION OF FIRST CLEANUP OF STATE SUPERFUND SITE

Arizona Department of Environmental Quality officials announced recently that the agency has reached a milestone, the first completion of cleanup work on a state superfund site, the East Washington Fluff site in central Phoenix.

The 10-acre site, located on the southwest corner of East Buckeye Road and South Fifth Street, was once major, contaminated urban blight near Phoenix's central core with more than 6,000 tons of shredded auto materials and other waste from an abandoned metal salvage yard.

But the signing of the record of decision makes it the first of ADEQ's 36 Water Quality Assurance Revolving Fund (WQARF) sites in the state to be removed from the WQARF registry.

"This is a huge day in the history of the Arizona Department of Environmental Quality," ADEQ Director Henry Darwin said. "The East Washington Fluff site presented major challenges to overcome during a long period of time and it's a credit to our staff to see this come to fruition."

Phil McNeely, environmental programs manager for the city of Phoenix, also said he was pleased to see the site removed from the state superfund list.

"ADEQ, EPA, and the city worked closely together for many years to transition this site from a blighted eyesore to a property that is now an opportunity for business redevelopment near downtown in a key area within walking distance of Chase Field," McNeely said.

In 1986, National Metals Co. abandoned the site and declared bankruptcy, leaving thousands of tons of shredded glass, plastic, rubber and fabric behind.

ADEQ gained access to the property in 1997 and inspectors determined that it had levels of cadmium, chromium, lead and polychlorinated biphenyls (PCBs) which exceeded state and federal U.S. Environmental Protection Agency health standards. A 12-foot-high fence and warning signs were posted around the site and the site was added to the WQARF registry in June 1999.

The EPA placed three monitoring wells at the site in 2000 and no groundwater contamination was found. But a report conducted by the Arizona Department of Health Services and Agency for Toxic Substances Disease Registry determined that a health hazard existed.

In 2001, about 5,907 tons of hazardous waste and 819 tons of additional solid waste were

removed from the site and a protective soil cap installed to prevent exposure to any remaining contamination in the soil. After ADEQ completed investigative reports, the site was purchased at public auction in 2006 and a deed restriction entered that the engineered soil cap must remain in place and that the site be used for only business or commercial development.

In 2008, soil sampling beneath a concrete slab removed by the property's new owner showed lead contamination at low levels and about 235 tons of soil was removed. A layer of crushed, recycled concrete debris about two feet deep was placed on top of the existing engineered cap in that part of the site. The concrete debris was further crushed to 3 inches or smaller and spread across the site.

MARICOPA COUNTY AIR QUALITY DEPT OPENS NEW CUSTOMER SERVICE OFFICE

The Maricopa County Air Quality Department recently announced the grand opening of its new customer service office located on the first floor of the department's main office at 1001 North Central Avenue, suite 125, Phoenix, AZ 85004.

Customer service hours at this location will be from 8 am to 5 pm Monday through Friday. The onsite staff will accept and process applications for dust, stationary source, asbestos, and burn permits as well as all other department documents. Payments can be accepted for all Air Quality fees in the form of cash, credit card, or check.

"Creating a full service intake counter at Air Quality's main office will further reduce permitting timeframes to better serve the citizens of Maricopa County," Air Quality Department Director Bill Wiley said.

The existing customer service location at One Stop Shop, 501 North 44th Street in Phoenix, will continue to be available to meet customer needs.

EPA FINES SIX ARIZONA SCHOOL DISTRICTS FOR ABSESTOS VIOLATIONS

The U.S. Environmental Protection Agency recently announced it fined six Arizona school districts a combined total of \$94,575 for Asbestos Hazard Emergency Response Act (AHERA) violations. More than 15,000 children attend the 25 schools not in compliance with the federal AHERA in these districts.

During inspections conducted in 2011, EPA inspectors discovered numerous violations, from failing to inspect

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Contact: Norm Weiss @ (602) 870-5504 Web Site: www.nweissassoc.com facilities for asbestos containing materials, failing to re-inspect campuses with known asbestos containing materials, and failing to have an Asbestos Management Plan. All of the school districts have since taken necessary actions to comply with the law, with the cost of compliance reducing the penalties in most cases to zero.

"Asbestos in schools has the potential to harm the health of students, teachers, and maintenance workers," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "EPA takes these violations seriously, and we are satisfied the schools have now

conducted inspections and put their asbestos plans in place."

Each school district is allowed to subtract properly documented costs of complying with the regulations from the penalty amount. The six school districts are:

- Apache Junction Unified School District (Pinal County): fined \$21,675, but this was reduced to \$7,933 because of the school district's cost of achieving compliance.
- St. John's Unified School District (Apache County): fined \$14,195, reduced to \$824 by the school district's cost of achieving compliance.
- Florence Unified School District (Pinal County): fined \$31,705, but no cash payment was due because the documented costs of compliance exceeded the penalty.
- Vernon Elementary School District (Apache County): fined \$2,700, but no cash payment was due because the documented costs of compliance exceeded the penalty.
- McNary Elementary School District (Fort Apache Indian Reservation): fined \$14,200, but no cash payment was due because the documented costs of compliance exceeded the penalty.
- Round Valley Unified School District (Apache County): fined \$10,100, but no cash payment was due because the documented costs of compliance exceeded the penalty.

Federal law requires schools to conduct an initial inspection using accredited inspectors to determine if asbestos-containing building material is present and develop a management plan to address the asbestos materials found in the school buildings. Schools are also required to appoint a designated person who is trained to oversee asbestos activities and ensure compliance with federal regulations. Finally, schools must conduct periodic surveillance and re-inspections of asbestos-containing building material, properly train the maintenance and custodial staff, and maintain records in the management plan.

Jason Bolen 623.580.7800 Cell 602.739.0083 Fax 623.434.0029 jbolen@aerofire.com AUTOMATIC SPRINKLER C 21605 N. Central Ave. Phoenix, AZ 85024

> Local education agencies must keep an updated copy of the management plan in its administrative office and at the school which must be made available for inspection by parents, teachers, and the general public.

PAS TECHNOLOGIES, INC. TO PAY \$100,000 PENALTY TO RESOLVE HAZARDOUS WASTE VIOLATIONS IN **ADEQ PLATING INITIATIVE**

÷ The Arizona Department of Environmental Quality announced recently that PAS Technologies, Inc. of Phoenix will pay a \$100,000 penalty as part of a consent judgment entered in Maricopa County Superior Court for hazardous waste violations at its Central Phoenix plating facility.

PAS Technologies was cited for a total of 15 violations, including the release of hexavalent chromium to the environment and illegally treating cyanide wastewater.

The case against PAS Technologies included 10 different violations of disposal of hazardous waste without a permit, failure to perform hazardous waste determination, and four violations in the employee training, handling, marking and storage of waste fluorescent lamps. Continued on next page

munities are working on such initiatives as forest thinning, renewable energy, recycling, composting, historic preservation, water management and bike sharing, among other innovations. Additionally, more than 25 exhibitors showcased sustainability initiatives around the state, further demonstrating a new era of collaboration. As many throughout the country cele-

brated Earth Day last month, Arizona is fostering leadership in creating an ethic of environmental stewardship Diane Brossart as a way of life. President



ASSOCIATION PAGES CONTINUED FROM PAGE 9





STEWARDSHIP HEROES HELP SHAPE FUTURE OF ARIZONA

Mayors of our cities and towns, large and small, are trying to make their communities more sustainable, and they're even sharing ideas to support one another. The top elected official in 10 municipalities statewide gathered last month with nearly 250 business leaders for a Stewardship Summit designed to help shape Arizona's future environmentally and economically. The com"Their unlawful management of hazardous waste put employees and the environment at risk, but we are encouraged by the changes made at PAS," ADEQ Director Henry Darwin said.

The settlement with PAS Technologies brings to 12 the number of electroplating facilities in Arizona brought into compliance with hazardous waste rules under ADEQ's "Plating Initiative."

ADEQ launched the Plating Initiative in 2008 after facility inspections beginning in 2004 determined that many facilities were not in compliance with the Arizona Hazardous Waste Act, which regulates hazardous waste in the state.

The consent judgment is subject to court approval.

TOWN OF PRESCOTT VALLEY AGREES TO \$675,000 SETTLEMENT TO RESOLVE WASTEWATER SPILLS FROM 2010-12

The Arizona Department of Environmental Quality announced recently that the Town of Prescott Valley has agreed to a \$675,000 settlement for numerous wastewater spills due to contractor failure, including the discharge of 1.6 million gallons of wastewater into the Agua Fria River in January 2010.

In addition to paying a \$25,000 penalty, the town must complete a Supplemental Environmental Project (SEP) valued at \$150,000 and implement a "Sanitary Sewer Overflow Action Plan," valued at \$500,000, to resolve at least 10 separate untreated wastewater discharges that occurred between 2010 and 2012.

The SEP includes the installation during the next year of computerized equipment at all 10 of the town's sewage collection pump stations to link with the town's wastewater treatment plant. It is intended to provide early detection and response to potential malfunctions or overflows before substantial environmental impacts occur.

The action plan includes the purchase of a new sewer-cleaning truck that will be used to clean the town's 280 miles of collection system pipelines and manholes during a two-year period and distributing and airing educational materials intended to reduce flushing of items that may cause line blockages. Also, a review of emergency response procedures and surveying, inspecting and sampling of large commercial or industrial customers whose wastewater contains pollutants that may require pre-treatment prior to disposal into the town's sewers will be performed.

"These spills could have been prevented or stopped much more rapidly had the town manned its facilities or inspected them more frequently." said ADEQ Director Henry Darwin. "The substantial commitments made by the Town of Prescott Valley in this settlement will provide environmental benefits to Yavapai County and its citizens well into the future by reducing the frequency and volume of unplanned discharges."

A total of more than 2 million gallons of wastewater were discharged in all the events. The largest occurred Jan. 21-22, 2010 at the town's wastewater treatment plant, 1100 E. Treatment Plant Drive, following a series of equipment and alarm failures that occurred while the plant was unmanned. Town of Prescott Valley Agrees to \$675,000 Settlement to Resolve Wastewater Spills from 2010-12 Date 2-2-2 A second large discharge occurred from Oct. 13 - 18, 2011, when approximately 320,000 gallons of sewage overflowed from the town's Quailwood pump station, located in Dewey-Humboldt, after a failure to reset the alarm, two pumps failed, and an extended time between pump station inspections.

The settlement is subject to court approval.

COMPLIANCE ORDER ISSUED TO TANGERINE WATER GROUP OF MARANA FOR REPORTING VIOLATIONS AT ITS WATER SYSTEM

Arizona Department of Environmental Quality officials announced recently that a compliance order has been issued to Tangerine Water Group Corp. (TWG) of Marana in Pima County for a number of reporting violations at its public water system.

The water system, located at 8359 W. Tangerine Road in Marana, serves drinking water to 60 customers.

"We have attempted repeatedly to resolve this problem with the company but have received no response," said ADEQ Director Henry Darwin. "This is a public health threat to its customers and TWG needs to respond expeditiously to this compliance order."

TWG has not provided analytical testing results to ADEQ for levels of total coliform from 2008 through 2012, for levels of nitrates in the second and third quarter of 2012, and for levels of lead and copper in 2004 and from 2007 through 2011. TWG also did not issue a public notice to its customers of the monitoring violations.

TWG has not filed required documentation with ADEQ that the company employs a certified operator who holds a required Grade 1 water distribution operator certificate to operate the water system.

> Tangerine Water Group also did not provide ADEQ with a copy of required consumer confidence reports for 2005 through 2011 and certification that the reports were distributed to customers.

In addition to the compliance order, a \$4,000 civil administrative penalty also was issued to TWG.





JOE C. HOLMES JOINS UNIVAR

Joe Holmes has taken an Account Manager position with Univar. He will be responsible for clients in the power generation and manufacturing who purchase industrial chemicals from Univar. Although not a complete career change, it is considered an industry change and a move away from the environmental field where he spent almost 20 years. Joe can be reached at 602-272-3272 or by email at Joseph.Holmes@univarusa.com.

Joe C. Holmes

MARTIN J. MINTER JOINS JBR **ENVIRONMENTAL CONSULTANTS, INC.**

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4 Martin (Marty) Minter, PG, RG, CRS, CEM, has taken a position as Senior Geologist/Environmental Project Manager with JBR Environmental Consultants. He will be responsible for compliance assurance, permitting, assessment, remediation, and GIS services, and business development. Marty can be reached at 480-829-0457 or by email at mminter@jbrenv.com. JBR maintains a website at www.jbrenv.com.



Martin J. Minter



FRANK SANCHEZ JOINS ADVANCED CHEMICAL TRANSPORT

4 Frank Sanchez, CHMM, has recently joined ACT (Advanced Chemical Transport) as Account Manager providing hazardous waste management and environmental services. Frank can be reached at 480-297-3224, or by email at fsanchez@ advancedchemical.net. ACT maintains a website at www.advancedchemical.net.

Frank Sanchez

at cburke18@cox.net.

CHUCK BURKE RETIRES FROM ADEQ \oplus Chuck Burke is retiring after 17 years of state service. He has been with ADEQ since 1995 and helped to create a successful Pollution Prevention (P2) Program at ADEQ that also laid the groundwork for the LEED certified green ADEQ building. Chuck represented ADEQ at many P2 conferences and other sustainability events throughout the state. He was one of only two Arizonans ever to receive the Regional Advocate of the Year Award from the Western Sustainability

and Pollution Prevention Network which represents EPA

Region 9, CA, AZ, NV, and HI. Chuck can be reached



Chuck Burke



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9TH ANNUAL: ATEKEEPER REGULATORY ROUNDUP



GRR Planning Committee (L to R): Lisa Culbert (Layne Christensen), Chuck Paulausky (CP Safety & Environmental), Sylvia Castillo (AZERC), Nancy Nesky (ITSI Gilbane), Mark Howard (AZSERC), Michael Ardito (EPA Region 9), Skip Harden (Transwest Analytical Services). Not pictured: Michael Ford, Chair (Polsinelli Shughart), Maribeth Klein (Polsinelli Shughart), Laura Adams (Republic Services), and Mannie Carpenter (JBR Environmental Consultants, Inc.)





he Environmental Professionals of Arizona (EPAZ), Thunderbird Chapter of the Alliance of Hazardous Material Professionals (AHMP), and the Arizona Emergency Response Commission (AZSERC) co-hosted the 9th Annual Gatekeeper Regulatory Roundup April 2nd & 3rd at the Chaparral Suites Resort in Scottsdale, AZ. Keynote speakers on Day 1 included Robert Rooney, Dan Porth, and Diane Fernandez, Arizona Division of Emergency Management, on Super Storm Sandy: What we brought to the table ... and what she left on our door step." Day 2 Keynote speakers included Adam Hawkins and Amanda Reeve, providing a "Legislative Roundup." For information visit www.epaz.org.



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