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ARIZONA

HOW CAN I GET MY AIR PERMIT FASTER?

BY TODD MARTIN AND RICHARD SUMNER, PE PG 4

HELIUM PRIVATIZATION ACT: UNINTENDED CONSEQUENCES

BY LARRY OLSON, PhD, PG 8

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“HOW CAN I GET MY AIR PERMIT FASTER?”

TIPS FOR MARICOPA COUNTY AIR QUALITY PERMIT APPLICANTS: SPEEDING UP THE PROCESS

by Todd Martin and Richard Sumner, P.E.

We are often asked this question here in the Permitting Division at the Maricopa County Air Quality Department. It typically follows “How long does it take to get an air permit?” when the answer was not

quite what the applicant was hoping. We have been able to significantly shorten timeframes as Table 1 shows. But you as the applicant play a major role in the process. The following tips are provided as ways you can help make the process quicker, smoother and less costly.

START EARLY

This may be obvious, but as soon as you initiate your plans for constructing a facility in Maricopa County, begin to develop an air quality permit application to submit at the appropriate time. There are many factors such as complexity, location, process type, emission profile, etc. that impact schedule. The quicker those factors can be defined and analyzed, the shorter the timeframe to permit issuance. As part of the early activities, begin to dialogue with us to address preliminary questions and the procedural roadmap.

SET UP A PRE-APPLICATION APPOINTMENT

Once the project begins to take shape, come in for a face-to-face meeting with our Permitting Division engineers and supervisors so all participants can be introduced and become familiar with the respective roles. Bring the preliminary application and ask questions about the permitting process while we develop an understanding of the project. Discussing your plans with us at this early stage in the process can help you avoid some of the questions that often arise with permit applications as well as introduce you to the assigned engineer. For large or complex projects it is also advisable to set up a second meeting with us soon after you submit the permit application. This will clear up any preliminary questions we have with the information in the application and give the facility representatives a sense of what you should expect from us in the following months. Regular, constructive communication that begins at the pre-application meeting is a key element to a smooth permitting process.



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TABLE 1 – AVERAGE PERMITTING TIMEFRAMES

Permit Type	2012 Average	2013 Average
Dust Control	3.4 Days	0.8 Days
General Permit	3.0 Days	1.3 Days
Non-Title V Permit	98 Days	77 Days

MAKE SURE THE PERMIT APPLICATION IS COMPLETE AND ACCURATE

When you are preparing the application and are ready to submit, be sure to thoroughly read and follow the directions that accompany each application form. This includes basic elements such as:

- appropriate permit fee;
- typing or completing the application in blue or black ink;
- application signed by a responsible official in ink;
- site diagram;
- detailed description of your facility, processes and emission points;
- emission estimates

Since the permit writer might not be familiar with your facility and activities, providing specifics will facilitate the permit process and result in a more accurate, representative permit.

INCLUDE CALCULATIONS AND CITATIONS WITH YOUR PERMIT APPLICATION

Including emission calculations and emission factor citations with the permit application helps us review your project. It is even more beneficial if the calculations are provided in an electronic format to further expedite review. Without such citations and calculations, we will have to research and reproduce the work that you have done to ensure that the facility will meet state and federal requirements. Reproducing your work takes time on our part, which can delay the issuance of your permit. We have compiled emission factors for several common industries to assist you that can be found at: http://www.maricopa.gov/aq/divisions/planning_analysis/emissions_inventory/instructions.aspx

IDENTIFY YOUR STACKS AND EMISSION POINTS CONSISTENTLY

The best way to identify all of your emission points is to complete your process flow diagram and plant layout before you begin filling out specifics in your permit application. After you have identified all of your emission points, emission units and control equipment, you will want to give each of them a number or other identifier. It is important that you use these numbers or identifiers consistently throughout the application.

RESEARCH

In addition to Maricopa County requirements, your facility may be subject to federal air quality regulations such as New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP). Each NSPS and NESHAP may have testing, monitoring, recordkeeping and reporting requirements. These requirements could influence your decisions regarding the equipment that you install. For information regarding these standards, contact our Small Business Assistant at (602) 506-5102.

GET HELP

Although not required, we encourage facilities to utilize qualified consultants who are familiar with Maricopa County air quality

regulations, air quality permits and your facility's processes. This not only expedites the process but should also make the permit application more complete and accurate. Our Small Business Assistance office is also available to help you with questions early in the process.

RESPOND PROMPTLY

During the course of processing your permit application, the permit engineer may have questions or require additional information in order to proceed. A prompt response to questions will ensure continued progress with the permit.

AVOID "AS BUILT" DIFFERENCES

Be sure to include information for all of the equipment that you plan to install. Not only is it important to tell us what you will install, but it is also very important that you install the equipment that you specified in your permit application. By avoiding "as built" differences, you can avoid potential permit violations and waiting for a permit revision. If your plans change after you have submitted an application, you are obligated to submit updated information to us.

READ AND MAKE COMMENTS TO THE DRAFT PERMIT

Once the application is reviewed and deemed technically complete by us, the permit writer will draft a permit and technical support document based on the application materials. The draft permit will be sent to the designated facility representative for comments. Thoroughly review the document to confirm that references to equipment are correct and that you will be able to operate under the required conditions. Make sure you understand and are prepared to comply with all of the recordkeeping, reporting and monitoring requirements in the permit. It is key to include operations and maintenance personnel in the review process since these individuals will likely be at the forefront of complying with the permit terms. If the review results in changes to the permit, it is much easier to make revisions to a draft permit than a final permit.

UNDERSTAND THE FINAL PERMIT

Once the permit is finalized, the facility representatives will be responsible for compliance with the permit conditions. It is very important for facility staff and managers to understand these requirements to prevent permit violations. Although not required, it is helpful for larger facilities to have at least one full-time person dedicated to maintaining compliance with the environmental regulations and permits. We operate under a

Continued on next page

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HOW DO I GET MY AIR PERMIT FASTER?

AIR PERMIT TIPS

CONTINUED FROM PAGE 5

"Compliance Assurance" model. This simply means that we want each and every permit holder to comply with all of the requirements and prohibitions contained in the permit. After the facility receives the final permit, our engineers and compliance staff are available to walk you through the details to help you meet the conditions contained in the document.

In summary, our mission is to provide clean air to Maricopa County residents and visitors so they can live, work and play in a healthy environment. Enforceable, understandable permits are a key component of the regulatory thread. It is also our goal to deliver those permits in a timely manner that meets the regulatory requirements. We have made great strides in improving timeliness. Employing the principles described above will further improve our ability to help you get your permits faster.

Todd Martin is the Non-Title V Permitting Supervisor with the Maricopa County Air Quality Department. Todd can be reached at 602-506-7248 or by email at TMartin@mail.maricopa.gov.

Richard Sumner, P.E., is the Permitting Division Manager with the Maricopa County Air Quality Department. Richard can be reached at 602-506-1842 or by email at RichardSumner@mail.maricopa.gov.

JOURNAL OF Environmental Management ARIZONA

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FROM THE EDITOR



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COVER PHOTO: HELIUM BALLOONS. SEE RELATED ARTICLE PAGE 7.



Larry Olson, PhD.

IT'S ALL ABOUT CHEMISTRY

UNINTENDED CONSEQUENCES

Some of you may have discovered helium was in short supply when you couldn't buy a helium filled balloon for a birthday party. Much more serious, though, was the possibility the shortage could cause delays in receiving an MRI, the loss of anti-terrorist radiation monitors, or a shortage of flash memory chips, all of which depend upon helium.

How did we get into this dilemma? The story begins in 1925 with the establishment of the Federal Helium Reserve near Amarillo, Texas. Back then the main use for helium was in blimps. Helium is the second lightest element, so it has great lifting capacity, and unlike hydrogen, it isn't flammable. The reserve was established to ensure the military would have enough helium for its airships. It is the only significant long term helium storage in the world.

Helium is a plentiful element in the universe, but it is scarce on earth. We can't make helium, but it is formed by the radioactive decay (as alpha particles) of heavy elements. Because He is so light, once it is in the atmosphere it can escape from the earth's gravitational field (its concentration in air is only 5.2 ppm). But some helium is trapped underground in the same geological formations that can trap natural gas. Thus, sometimes it is possible to extract helium as a secondary byproduct from drilling for natural gas. You need at least 0.3% He in a natural gas well to make it economically feasible to separate it. However, unless expensive recovery equipment is installed the helium will be lost to the atmosphere and will be gone forever.

Fortunately, much of the natural gas in the Texas panhandle and western Kansas contains high concentrations of helium and historically the U.S. has produced 75% of the world's supply. Over time, the Reserve kept accumulating helium until by 1992 there were 32 billion cubic feet stored, which was ten times the annual world usage then. But the cost of buying and storing

this much helium left the Reserve \$1.4 billion in debt and that made it a prime target for a budget cutting Congress. So in 1996 the Helium Privatization Act required the federal government to sell the stored helium to repay the debt and then close the facility. Three unforeseen consequences occurred.

The expectation was that private firms would step in and take over the federal role in production, but that hasn't happened. The debt was scheduled to be repaid in October 2013 and the Act required the storage facility to be closed even though helium remained and there is no alternative source. This was the helium version of the fiscal cliff. One third of the world's supply was going to be suddenly cut off. Secondly, the helium was being sold on a "straight line" basis with the focus on paying off the debt. But the helium is stored in a huge structure of porous rock and pulling it out too fast can result in lowering the recovery rate and cause an ultimate loss of much of the stored gas. It may work for the accountants, but it doesn't factor in geology. Finally, the government was discouraging private investment by selling at below market rates. Because of the extensive federal role in production, there never has really been a true He market and it will take time to develop a very expensive infrastructure elsewhere to store and transport the gas.

Helium is important not just because of dirigibles or party balloons. As the lightest noble gas, it has the lowest boiling point of any element, only 4 degrees above absolute zero. That makes it irreplaceable as a cryogenic coolant for superconducting magnets. 28% of helium use is for this purpose. Another 26% is used for purging pressurized rockets of explosive liquid oxygen and hydrogen. Because it is chemically unreactive, helium has found use as a shielding gas in welding or laser cutting operations and in semiconductor manufacturing. It is even used in specialized breathing gases for deep sea diving.

With these new uses, consumption patterns have changed. In 1995, annual worldwide consumption was 3.75 billion cubic feet, more than 75% by the U.S. By 2012, consumption had grown to over 6 billion cubic feet. Almost all that growth was due to foreign use and the U.S. share had dropped to 43%. There are new helium production facilities being developed around the world, but delivering the product to customers in the U.S., Europe and China will be very expensive. U.S. sources are being depleted and even though natural gas production from fracking shale deposits has soared, there is little helium in these fields. At this point, every cubic foot of helium produced is being immediately consumed.

In the midst of the government shutdown debacle, Congress and the Senate on October 2 did finally agree on the Helium Stewardship Act of 2013 which allowed the continued operation of the Federal Reserve, thus avoiding a dramatic destabilization of the global helium supply. But this Act doesn't produce any new helium. It has taken millions of years for the helium deposits on earth to form. Some estimates have us using them all up in another 40 years or so. Makes you think twice about buying that helium filled balloon.

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.

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SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT



Nicholas R. Hild, PhD.

US ECONOMY STILL FOSSIL BASED AFTER 40 YEARS OF ENERGY POLITICS & POLICIES

“Under existing policy, proven technologies that save money can be scaled up in cogeneration, local food, small hydro, energy efficiency, vehicle conversions to natural gas, water pressure capture, industrial efficiency, livestock intensification, and energy access”

JIGAR SHAH, STANFORD SOCIAL INNOVATION REVIEW,
(ONLINE), OCTOBER 23, 2013

When the Water Quality Act Amendments of 1972 were promulgated over (then) President Nixon's veto by a 2/3 majority vote, it signaled the beginning of a decade of environmental law-making that, at the time, showed that we were a nation that valued our air, water, and natural resources.

What is missing from that time period of escalating 'environmentalism' in the U.S. is any concern for what our fossil-fueled energy policies (or lack thereof), were doing to the environment. And, any interest in global climate change, at that time, was still far into the future; nobody seemed to see that coming.

Ten years earlier, in 1962, Rachael Carson's *Silent Spring* began the 1960's decade of national unrest by challenging the status quo when she brought her well researched work into the national spotlight by highlighting the impact pesticides (e.g. DDT) was having on our natural environment, signaling the beginning of a national effort to address man-made pesticides and their impact on our fragile eco system. (Note: In the 1980's, the EPA determined that Arizona was, "...the most DDT-(pesticided) state in the U.S...." which was confirmed by what we were finding when conducting soils tests for hazardous waste remediation of former agricultural lands throughout Arizona where DDT was used to combat pink bollworm before B-T Cotton was perfected at the U of A.)

But, in the decade between Carson's book and President Nixon's veto of the WQA Amendments, 50,000 young men had already died and 250,000 casualties were victims of an undeclared war in southeast Asia. By 1973, Nixon was beginning to relent to pressures from a disgruntled congress on the hill who were feeling the heat from their constituents to live up to his/their reelection promises to end the war and bring the troops home.

But, he was not about to sign into law, the WQAA that he felt would...(paraphrasing)..."cripple the very industry that was supporting the jobs that built the defense machines, and worse, it would strike a blow to the national economy at a time when energy costs to produce products were unstable and jobs were badly needed..." while at the same time thinking he would be seen as a weak President if he caved into public pressure to stop the war. So,

he vetoed the WQAA and let the news leak that he would likely begin to bring the troops home...soon.

Yes, the political version of 'environmental impact' is all about the dollars. Always has been; always will be. But there is a lesson here for all you wannabe policy makers: take a note from the history of the environmental movement in this country. Now, as was the case then, getting attention focused on environmental issues and actual change in environmental policies, was not ever easy but it did become a part of the late 1960's protest movement and, ultimately resulted, in 1977, in President Carter making the Department of Energy a cabinet-level function which it still is today.

In fact, in 1973 when the OPEC countries put the Arab Oil Embargo in place which led to a shortage of gas and diesel fuel availability (and long lines at the pumps around the country), President Nixon was moved by the run-up in prices to hastily construct legislation which basically required auto makers to design and offer more fuel-efficient autos while reducing the 'national' speed limit to 55 mph on the nation's highways. But all that 'policy-making' was about saving dollars at the pump; not about saving the environment.

And so here we are today with energy policies that still have the goal of energy independence (but that would be fossil-based energy; not policy that funds the alternative energies research necessary to really achieve 'energy independence' for a sustainable energy future that will reduce our fossil-fueled carbon footprint.) Only when we do that can we ever talk about the reality of 'energy independence'.

A recent USA Today article by Wendy Koch (October 23, 2013), is an excellent brief history of how we got from the 1973 Oil Embargo to where we are today (through 2012) by citing several statistics which, by themselves, clearly show that our energy policy has always been, and continues to be, about the dollars (and the impact on the economy):

YEAR	AVG. VEHICLE FUEL EFFICIENCY (MILES/GALLON)	CRUDE OIL IMPORTED (MILLION BBL/DAY)	U.S. CRUDE PRODUCTION (MILLION BBL/DAY)	AVG. PRICE OF REGULAR (DOLLARS/GALLON)
1973	12.9	3.24	9.21	\$0.36
2012	24.7	8.53	6.49	\$3.62

Re-Cap: The price of a gallon of regular gas in 1973 (2012 equivalent: \$1.85) has doubled; cars/vans/suv/small truck mileage has doubled (Note: total miles driven per year has also doubled, but the number of cars has also doubled so our mileage boost still means we 'burn' the same number of gallons in twice as many cars); the quantity of crude oil imported has tripled (not been reduced), while U.S. oil production has dropped by a third (with no effect on total quantity being consumed!).

Result: all the posturing politicians and policy-makers over the past 40 years have had almost zero effect on moving us from a fossil-dependent economy to a more sustainable future, not to mention the millions (billions?) of dollars spent by consumers and taxpayers during those four decades in the race to achieve 'energy independence'.

Call me a nattering nabob of negativity (Nixon's VP, Spiro Agnew, confronting war protesters in 1969), but those 40 years of bad energy politics and policies have put our nation into deeper and deeper dependence on fossil-based fuels and something needs to be done about it!

In 1990, World Resources Institute's Gus Speth said, "... the time has come for an environmental revolution in technology...twenty-first century technologies that integrate environmental goals into the basic design of transportation, manufacturing, energy and other systems." (Issues and Ideas, January 1990). If Jigar Shah (see entry quote above) is right and those technologies for energy systems are shovel ready today 20 years after Speth's admonishment, it is time to rally the masses to truly effect a change in energy policy. If we don't do something to effect real change in our energy policy now, how will we ever be able to explain another 40 years of fossil-fueled climate change to our 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.

NEWS BRIEFS

VEOLIA ES TECHNICAL SOLUTIONS, LLC TO PAY \$95,000 CIVIL PENALTY FOR FAILURE TO PROPERLY MANAGE PCB'S

❖ The U.S. Environmental Protection Agency recently announced it has required Veolia ES Technical Solutions, LLC to pay a \$95,000 civil penalty for failure to properly manage PCBs (polychlorinated biphenyls) at its Jefferson Avenue facility in Phoenix, Ariz.

The violations stemmed from two inspections in 2008 and 2010. EPA inspectors found the company used PCB-contaminated structures, and improperly stored and disposed of PCBs in violation of the federal Toxic Substances Control Act.

"Our goal is to safeguard workers and nearby communities from the health hazards of PCBs," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "This settlement ensures that Veolia will take necessary steps to improve its storage and disposal practices."

Veolia Environmental Services North America, the parent company of Veolia ES Technical Solutions, LLC, employs over 5,400 staff generating \$1.1 billion in revenues in 2012. The company specializes in the management, treatment and disposal of waste.

PCBs are man-made organic chemicals used in paints, industrial equipment, plastics, and cooling oil for electrical transformers. More than 1.5 billion pounds of PCBs were manufactured in the United States before the EPA banned the production of this chemical class in 1978, and many PCB-containing materials are still in use today.

When released into the environment, PCBs remain for decades. Tests have shown that PCBs cause cancer in animals and are suspected carcinogens in humans. Acute PCB exposure can also adversely affect the nervous, immune, and endocrine systems as well as liver function. Concerns about human health and the extensive presence and lengthy persistence of PCBs in the environment led Congress to enact TSCA in 1976.

This case is one of three PCB electrical transformer recyclers in the Pacific Southwest region. In the last two years EPA has inspected and taken enforcement action against all three PCB facilities regarding improper management. The last action involved Lighting Resources, LLC, a Phoenix based company, which settled in May.

For more information on PCB regulation and enforcement, as well as TSCA enforcement in general, please visit the EPA's website at: www.epa.gov/region09/toxic/pcb/

BTZ TO PAY \$40,000 PENALTY

❖ Arizona Department of Environmental Quality officials announced recently that BTZ, Inc. has agreed to pay a \$40,000 penalty for not properly maintaining the air pollution control device at its Yuma plant.

In December 2011, an emission test was conducted at the BTZ hot mix asphalt plant. The test results revealed that the facility's emission rate for particulate matter-10 (dust) was 15 times the permitted emission limit. Subsequent inspections conducted by ADEQ along with documents provided by the company revealed that the emissions device had not been properly maintained by BTZ.

ADEQ issued a notice of violation to BTZ for emitting pollution in excess of the facility's permitted limits in January 2012. After repairing the emissions control device, BTZ demonstrated compliance with its permitted emission limits the next month.

"Failing a stack test is a serious issue, especially in areas where dust pollution is a concern," said ADEQ Director Henry Darwin. "After being notified of the violation, BTZ took action to return to compliance quickly." Portions of Yuma County have been designated by the U.S. Environmental Protection Agency as a moderate non-attainment area for PM₁₀. Exposure to PM₁₀ can cause respiratory problems, particularly in the young and old, and can aggravate existing respiratory conditions.

BTZ Inc., doing business as Zeller's Excavating & Paving, operates a hot mix asphalt plant and crushing and screening operation in Yuma. The facility contracts services for excavation, demolition, paving and crushing.

The consent judgment is subject to court approval.

AIR QUALITY PERMIT ISSUED TO AMERICAN WEST POTASH, SOUTHEAST OF HOLBROOK

❖ Arizona Department of Environmental Quality officials announced recently that an air quality permit has been issued to American West Potash, the first permit to be issued for a large, proposed potash mining operation 30 miles southeast of Holbrook in Navajo County.

The permit incorporates all applicable state and federal regulations and all appropriate pollution control requirements, monitoring and record keeping provisions to ensure protection of human health and the environment. While not required by air quality regulations, American West Potash addressed ADEQ's request to work with the United States Forest Service and the National Park Service to document that the project would not adversely impact air quality at Petrified Forest National Park, which is located in close proximity to the project site.

American West Potash expects to begin construction of the mine in early 2015 and hopes to begin potash production in late 2017 or early 2018. The company anticipates creating more than 750 full-time positions and another nearly 200 jobs are expected to be created by outside businesses that will provide goods and services for mine operations.

"This mine could add nearly 1,000 much needed jobs to northeast Arizona's economy and our air quality permit is highly protective of human health and the environment," said ADEQ Director Henry Darwin. "This is an excellent example of how all parties can work together to protect the environment and grow the economy."

American West Potash LLC, headquartered in Denver, Co., owns mineral claims covering an area of 32,000 acres in the Holbrook Basin. The company has estimated that as many as 2.5 billion tons of potash could be extracted in the next 60 years from the region. Potash contains potassium in water soluble form that is used in fertilizers throughout the world.

In addition to the air quality permit, American West Potash is expected to need an aquifer protection permit, an Arizona Pollutant Discharge Elimination System (AZPDES) permit and possibly other permits from ADEQ before construction activities can begin.

US EPA ANNOUNCES \$65,000 TO HELP PIMA COUNTY EXPAND ITS USE OF GREEN INFRASTRUCTURE

❖ The U.S. Environmental Protection Agency recently announced \$65,000 in funds to help Pima County expand its use of green infrastructure to reduce water pollution and boost resilience to the impacts of climate change. The funding will help the county complete a green infrastructure guidance manual.

The southern Arizona project is one of six announced today in support of President Obama's Climate Action Plan, which directs federal agencies to identify climate-resilient investments such as agency grants and technical assistance for communities across the country. Green infrastructure builds resilience to the impacts of climate change, particularly by reducing the burden on local water infrastructure.

"Investing in green infrastructure pays off for our environment and our economy," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "We support Pima County's effort to create a detailed guide for the construction of green infrastructure designed to fit its desert environment."

Green infrastructure decreases pollution to local waterways by treating rain where it falls and keeping polluted stormwater from entering sewer systems. Green infrastructure tools and techniques include green roofs, permeable materials, alternative designs for streets and buildings, trees, rain gardens and rain harvesting systems. Communities are increasingly using innovative green infrastructure to supplement or substitute for "gray" infrastructure such as pipes, filters, and ponds.

In the last two years, EPA has provided \$1.35 million to more than 20 communities for green infrastructure. To share lessons learned from green infrastructure projects, EPA is releasing a series of reports highlighting the work of communities that received technical assistance from the agency in 2012, including Denver, Los Angeles, Phoenix, and Portland.

EPA is also announcing funds for green infrastructure to Detroit, Mich., Lincoln, Neb., Gary, Ind., Spartanburg, S.C., and Providence, R.I. This new funding continues the agency's support for communities using green infrastructure to reduce water pollution and protect human health while increasing economic activity and neighborhood revitalization, job creation, energy savings, and open space.

EPA has also released a new report analyzing the economic benefits of green infrastructure in 13 locations to help utilities, states, municipalities, and other stormwater professionals understand the potential financial benefits in their communities. Green infrastructure typically can cost less than traditional water infrastructure. Locations in the report include Minneapolis-St. Paul, Minn. Milwaukee, Wis., Portland, Ore., and West Union, Iowa.

More information on the green infrastructure assistance, progress reports and strategy: http://water.epa.gov/infrastructure/greeninfrastructure/gi_support.cfm.

More information on the economic benefits case studies: <http://www.epa.gov/nps/lid>.

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ASSOCIATIONS 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.



WWW.SAEMS.ORG

The August luncheon was held at Hotel Tucson. Our speaker was Douglas Kirkland, permit and regulatory compliance officer from Pima County. Doug presented on the updated Pima County Industrial Wastewater Ordinance. Our Pollution Prevention seminar was held September 25, 2013 at the Hilton East. This year we featured a P2 101 training and certification.

The SAEMS December luncheon will be at Hotel Tucson on December 11th. Our speaker will be Carlos Lopez from DOT speaking on the Phoenix Rail Project.

SAEMS highway clean ups are back, nine attendees picked up 26 bags of trash on September 21st along Interstate 10. Our next cleanup is scheduled for November 23rd.

If you are interested in joining SAEMS or attending an upcoming event please visit our website at www.saems.org.



Dawn Weyer
President



WWW.AZAEPP.ORG

The Arizona Association of Environmental Professionals (AZAEP) invites you to our November 26, 2013, meeting at Grimaldi's in Scottsdale from 6 to 8 p.m. The speaker will be Norris Dodd, Wildlife Connectivity Coordinator at ADOT and former AGFD biologist. He will talk about his current project on the History of Wildlife Connectivity Planning in Arizona. The monthly meetings include dinner and cost \$15 for members and \$20 for non-members.

Don't forget to put our popular Holiday Networking Mixer on your calendar! AZAEP is joined by the Air & Waste Management Association again this year in sponsoring the event. The 2013 Holiday Networking Mixer will be on Tuesday, December 10 from 6 to 8:30 p.m. at the Terroir Wine Pub in Scottsdale. There is a no-host bar and attendees are asked to bring a non-perishable food item for donation to local food banks.

AZAEP is the state chapter of the National Association of Environmental Professionals (NAEP) and we sponsor NAEP webinars in Phoenix and in Tucson. These Webinars are free to AZAEP members and cost non-members \$10. The topics include a wide range of subjects of interest to environmental professionals from the latest updates on NEPA to new regulatory options in ARPA compliance.

To become a member, join our distribution list for notices of monthly meetings, webinars and other events or learn more about AZAEP, please visit our new website at azaep.org! AZAEP also has a new post office address: P.O. Box 69, Tucson AZ 85702.



Patricia
Mariella, Ph.D.
President



AZ.ASSE.ORG

Greetings! As we prepare for the upcoming holiday seasons to come, and another year's end, I wanted to encourage you to give a gift to that special safety professional that deserves some recognition; the 2013-2014 SPY (Safety Professional of the Year) and the Executive of the Year award. These esteemed awards are awarded to those professionals and executives that have shown exemplary support of EH&S, so I encourage you to nominate someone you want recognized.

In other news and updates, during this chapter year I will be moving the chapter monthly luncheon around to better serve our members that might not make it to our meeting due to location, and create more value by attending. For December we will be back at the Arizona Country Club for our annual Toys for Tots toy donation drive and technical educational session. Then we will be bouncing around between the Shriners, PERA Club, and newly added Phoenix Art Museum! This comes with a free pass to enjoy the museum after our meeting at no cost. Check the website for details. We are also hard at work planning our 2014 PDC (Professional Development Conference) on April 24th and charity golf tournament the 25th. You can find registration and sponsorship opportunities at <http://www.asseaz.com> I encourage you to come and get some quality education for next to nothing and then enjoy the golf where we always have a good time and the prizes are always great! www.arizonagolfresort.com. Cheers!

Executive of the Year Award:

<http://az.asse.org/wp-content/uploads/2012/11/Executive-of-the-Year-Award.pdf>

Arizona Chapter

Howard Heideman
Safety Professional
of the Year Award:

<http://az.asse.org/wp-content/uploads/2012/11/SPY-Award.pdf>



Ryan
Oughterson
President



We'd like to thank everyone who attended and supported the 2013 AHS Symposium, "Shifting Boundaries: Recalibrating the Hydrologic Approach" at the Doubletree Reid Park Hotel in Tucson. This was our first conference at the more intimate venue of the Doubletree and a great time was had by all!

2014 AHS/AIPG Symposium planning is in full swing and will be held September 13-16, 2014, at the Prescott Resort and Convention Center (PRCC) in Prescott, AZ. Please contact Mike Tomlinson (tomlinson86@q.com) for information regarding symposium planning participation.

The next meeting of the Tucson Chapter will be held on Tuesday November 13, 6:00 pm, at the offices of Errol Montgomery and Associates, 1550 E. Prince Road. Claire Zugmeyer will present the status of the Sonoran Institute's Santa Cruz Living River Project. In Phoenix we will be meeting on November 13th at Nello's in Tempe; Enrique Vivoni, ASU; "Ecohydrology: Basic Concepts and Some Applications in Desert Systems." Social hour starts at 5:30. Visit the AHS web site for additional information and details at www.azhydrosoc.org.

Christie
O'Day
Executive
Director



WWW.AZCHAMBER.COM

The Arizona Chamber of Commerce and Industry and the Arizona Manufacturer's Council will hold its 2014 Legislative Forecast Luncheon on Friday, January 10, 2014 at the Phoenix Convention Center. This annual event features legislative leaders presenting their plans and agendas for the up-coming legislative session. More information is available at www.azchamber.com/events.

The Environment Committee's next breakfast meeting will be held on Wednesday December 11, 2013 at the Sheraton Phoenix Airport Hotel. The speaker will be Bill Warren, Director of the Arizona Division of Occupational Safety and Health addressing regulatory and policy changes affecting business and industry and providing a review of some of the serious industrial accidents that have occurred in the State. For more information contact Jeff Homer at jeff.homer@gdcd4s.com/480-441-6672 or go to www.azchamber.com/events.

Jeff Homer
Chairman
Environment
Committee



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The Alliance recently launched our newly redesigned website at www.azalliance.org. In addition to information about our organization and our activities, we will post our member's Annual Reports, presentations, and in other cases materials such as EMS programs. Mentoring and sharing technical information and expertise is a primary focus of our membership--so please feel free to review the materials on the website and/or call our office if you have specific information needs (480-422-7392).

The Pinal County Air Quality Dept. and the Alliance will sponsor an Air Quality Permit Compliance Assistance Seminar on Tuesday, January 14th in Casa Grande, AZ. There is no charge to attend, but advance registration is required. See our full page advertisement on page 15 for details.

Matt Conway
Chair



Continued on next page



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meets state standards for education, activities and funding for teachers. It's not too late to take advantage of the giveaways!

Teachers can still apply for up to \$5,000 in funding made possible by the Helios Education Foundation for environmental



projects in their classrooms, schools or community. They can also apply for a complimentary Masters of Education degree from University of Phoenix, Arizona Forward's official education partner for the event. Additional resources can be found online on the EarthFest page of arizonaforward.org.

For more information or application forms visit the website or call (602) 240-2408.

Diane Brossart
President



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SAEMS HOLDS P2 SEMINAR: P2 RE-ENERGIZED

The SAEMS Annual Pollution Prevention Seminar was held at the Hilton Tucson East in Tucson, September 25th. The theme of this year's seminar was "P2-Re-energized". Over 50 attendees participated and the event proceeds added \$2500 to the SAEMS Scholarship program.

The morning session consisted of a P2 certification and training session organized by the Western Sustainability and Pollution Prevention



Network (WSPPN). Scheduled featured speakers included Thomas Vinson of Zero Waste Network, Farah Mohammedmaeili of ADEQ, and Donna Walden of WSPPN. The afternoon session speakers included Dr. Dylan Boday of IBM, Doug Crockett of the City of Tucson, Greg Garfin of the University of Arizona, Grant McCormick of the University of Arizona, Ken Alward of Hilton Hotels, and Barry Rinehart of Central Arizona Project.

For more information on this or other seminars and on EPAZ visit www.epaz.org.



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AGENDA

Morning: Dr. Nick Hill, Introductions, PCAQCD Presentations on Permitting (Kale Walch, Anu Jain); Inspections (Bob Farrell); Enforcement Procedures (Mike Sundblom). Lunch Speaker: Mitch Klein, Attorney, Polsinelli. Afternoon: Presentations by Industry Professionals: Matt Conway, PING; Greg Bopp, Honeywell Aerospace, and Attorney Mitch Klein on "How to Respond to an Inspection." Bring all your questions with you!

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