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JOURNAL OF

Environmental Management

PRACTICAL AND CURRENT INFORMATION FOR ENVIRONMENTAL, HEALTH AND SAFETY PROFESSIONALS

ARIZONA

CROSSWORD CHALLENGE RETURNS

SEE PG 7

ALSO INSIDE:
ASSOCIATION PAGES,
NEWSBRIEFS,
COLUMNS & MORE

ARIZONA SUPERFUND SITE DELISTED

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UPCOMING EVENTS: MARK YOUR CALENDAR!

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ESS2013
Environmental &
Sustainability
Summit
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SEPT
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SAEMS P2
Seminar
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NOV
5 - 7
HMM
Certification
Prep Course
see ad pg 3

GLOBALLY HARMONIZED SYSTEM

OF CLASSIFICATION
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DEADLINE TO TRAIN EMPLOYEES:
DEC. 1 2013
BY HAL BERKOWITZ, PG 9



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Cover photo and article photos courtesy Mark Shaffer and ADEQ

SUPERFUND SITE DELISTED

ADEQ COMPLETES REHABILITATION OF ONCE-BLIGHTED PROPERTY

By Alyssa C. Clark

The Arizona Department of Environmental Quality completed work and delisted its first state superfund site in March. The department completed the rehabilitation process with hopes that the large, 10-acre, once-blighted property within walking distance of downtown would be redeveloped as a fully functional industrial site.

The current site owners, Harrison Properties, LLC, have adopted this same goal. The company intends to construct two buildings, 100,000 and 60,000 square feet in size, that will be leased long term to multiple tenants, said President James Harrison. ADEQ's extensive cleanup process made such development a possibility.

Thirteen years ago, the Arizona Department of Health Services deemed the site, located at the intersection of Buckeye Road and Fifth Street, a health hazard because of excessive lead, cadmium, chromium and polychlorinated biphenyls levels that were linked to learning disabilities, lung, liver and kidney damage. The previous owner, Newell Salvage

Co. abandoned the property in 1986, leaving behind the hazardous auto fluff of pulverized seat cushions, insulation and grease.

In 1997, ADEQ found these levels to be in

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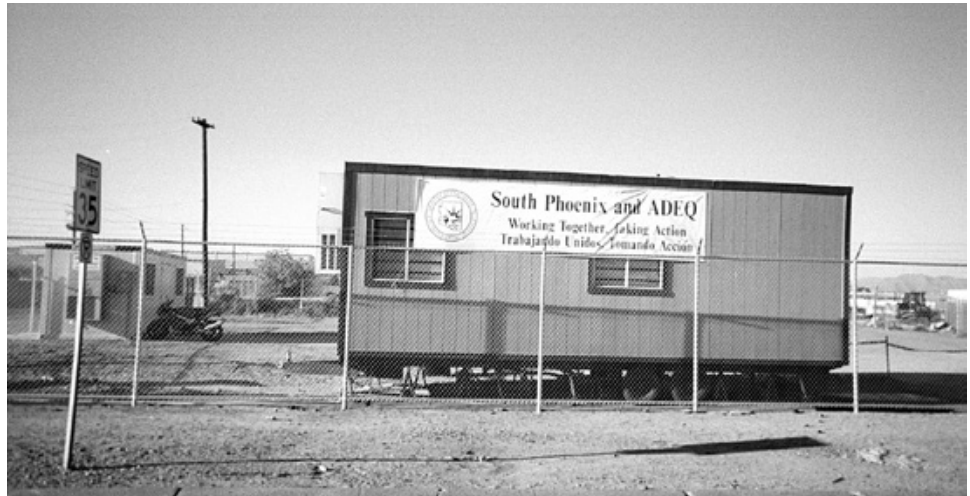
violation of state and U.S. Environmental Protection Agency guidelines. In response, ADEQ raised a 12-foot fence around the perimeter of the property and posted warning signs. ADEQ finally gained access to funds to initiate cleanup on June 16, 1999 when the location was added to the Water Quality Assurance Revolving Fund registry.

In March 2000, after the official health hazard was identified, ADEQ constructed three wells to search for water contamination. No pollution was found.

In response to the substantial health risk, ADEQ awarded a \$3 million contract to remove 5,907 tons of hazardous waste and 819 tons of solid waste from the area in 2001. The excavated waste was sent to a designated landfill site in Beatty, Nevada.

ADEQ then constructed a barrier around the contaminants, installed a soil cap, and opened a community information office directly across the street from the property to prevent further contamination, inform residents and monitor site activity.

In early 2007, the location was purchased by Harrison Properties, LLC, which had a history of



acquisitions in the area.

"It's very well located," Harrison said. "It's a rare opportunity that you get an inner-city piece of land like this with such excellent freeway access, major street access and heavy duty zoning. So we considered it infill development."

But, low levels of lead contamination were discovered in 2008, and ADEQ removed another 135 tons of impacted soil. Harrison's company then laid a two-foot layer of recycled concrete debris over the soil cap in 2010. The layer was later spread across the entire lot in a three-inch coating as per the finalized Proposed Remedial Action Plan.

Earlier this year, the site's Record of Decision was signed and the area was removed from the WQARF registry.

Harrison hopes to complete construction of the conceptual site plan by the close of this year and have the buildings leased by August 2014. Originally, Harrison had intended to lease the site to a local steel company, but an economic slowdown in the mining industry forced the company to put a hold on the project.

"It was a perfect deal for this property, and we were pretty excited about doing it," Harrison said. "But it's on hold. So, in the meantime there is a lot of momentum with the city market tax credit group about trying to get this

Continued on next page



JOURNAL OF Environmental Management

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FROM THE EDITOR



One feature in the Journal that always receives at least a few very enthusiastic comments when we run it is our "Crossword Challenge". In this issue, we have a new crossword for those of you who enjoy these puzzles (see page 7). This one is not difficult but perhaps it is a bit more "challenging" than previous puzzles; incorporating new environmental and safety words and acronyms that might require a little more effort to solve.

If you are, or know of, an Arizona college student in an environmental program keep in mind that several Arizona environmental associations sponsor annual scholarships. These organizations seek qualified candidates each year to submit applications -- in this issue the Environmental Professionals of Arizona (EPAZ) is currently seeking application submissions (see notice on this page, bottom right.)

If your environmental organization is hosting an upcoming event, please consider advertising the event in the Journal! The Journal reaches thousands of environmental professionals in Arizona, and a Journal advertisement is an effective way to increase attendance. Advertising is most effective when you can reach your readers well in advance of the event -- so be sure to contact the Journal at least 3 months before your scheduled date. Thank you!

Sincerely,
Jim Thrush, M.S. Environmental Management
Editor & Publisher
480-422-4430 x42

JOURNAL OF ENVIRONMENTAL MANAGEMENT ARIZONA
EDITORIAL Publisher & Editor: James Thrush, M.S. Env. Mgt., jimthrush@cox.net or 480-422-4430. SUBSCRIBE: cshomepage.com or 480-422-4430. RATES FREE to qualified EHS Professionals, others call. MAILING ADDRESS JEMA, 3145 E. Chandler Blvd, Suite 110-641 Phx, AZ 85048. ADVERTISING 480-422-4430 x42. Published 6 times/year. Copyright ©2013 by JEMA. All rights reserved. LEGAL DISCLAIMER Information presented in JEMA originates from sources presumed to be accurate and complete. Due to the rapidly changing nature of regulations and the law and our reliance on information provided by various sources, we make no warranty or guarantee concerning the accuracy or reliability of the content of JEMA. Readers are encouraged to contact authors, agencies, and advertisers directly for verification/clarification. Content for informational purposes only, and should not be considered legal or professional advice. Consult your legal counsel or environmental consultants for advice. WARNING Serious legal, environmental, and/or safety consequences can result from non-compliance with environmental and safety regulations and standard safety, environmental, and professional practices.

COVER PHOTO: VIEW OF DOWNTOWN PHOENIX SKYLINE AND THE RECENTLY DELISTED SUPERFUND SITE. SEE ARTICLE PG 4. PHOTO COURTESY OF ADEQ.

SUPERFUND SITE DELISTED

CONTINUED FROM PREVIOUS PAGE

thing financed, and also the brownfields grants, which I don't want to lose. So, the intention was to go ahead and do a project and take advantage of that financing that's out there."

Though Harrison Properties, LLC had plans for the land prior to the completion of cleanup, the property's status as a closed superfund site provides greater industrial opportunity for the land.

"Because of its inner-city location there were (storage) yard opportunities to rent it for a variety of uses," Harrison said. "But now that it's lifted from the superfund, it allows it to be redeveloped into what we're talking about because it is financeable."

ADEQ's work on this site produced substantial effects and transformed a health hazard into an operational industrial site for a low-income area in need of employment.

"I was amazed when (ADEQ) had their party for this site, how many people actually stood up and said they'd worked on that site over the last 20 years," Harrison said. "It's an incredible effort that the people at ADEQ have put in to get it clear."



Cover Photo: The rehabilitated Phoenix site.

Alyssa C. Clark is a student in the Walter Cronkite School of Journalism and Mass Communications at Arizona State University and intern at Arizona Department of Environmental Quality. Alyssa can be reached at (602) 771-4775.



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Applications due by: September 30, 2013

CROSSWORD CHALLENGE:

THEME: HAZARDOUS MATERIALS, SAFETY, & ENVIRONMENT

Crossword puzzle Key
can be found on page 9

Across

2. Materials that could cause dangerous reactions by direct contact with one another.
6. Thermal spring that ejects with force.
9. A form of oxygen that can be "good" or "bad" depending on where it is found.
10. A ____ sample, usually of water, collected at a particular time and place.
14. A tough, environmentally indestructible plastic that releases hydrochloric acid when burned.
16. Written information on a specific chemical compound.
19. Large stream that flows in a defined course.
21. A test for a particular chemical or effect.
22. The unsaturated region between soil surface and the water table.
24. Unit of light measurement.
25. Home to bees.
26. Form of H₂O found on plantlife at lower temperatures.
27. A site used to dispose of solid waste without environmental controls.
28. Pesticide banned in the US in 1972 because of its persistence in the environment and accumulation in the food chain, has a half-life of 15 years.
30. Remedy to relieve or counteract effects of poison.
36. Unit of measurement in chemistry
37. Responsible for establishing and enforcing standards for exposure of workers to harmful materials in industrial atmosphere.
40. Untreated, as in untreated sewage.
41. Submarine depression.
42. Quantity of heat.
43. Has mass and occupies space.
44. One of these equals 760 mm Hg at sea level.
45. The mineral content of a product remaining after complete combustion.
46. An _____ stream flows only in direct response to precipitation.
50. This type of facility requires a permit under the hazardous waste programs.
55. The heart of a nuclear reactor containing uranium
56. Does not allow another substance to pass through or penetrate.
58. Measures concentration of hydrogen ions.
59. Regulates poisons sold to the public, requires labels carrying health warnings.
61. Form of H₂O, can affect vacation plans.
62. A measure of radioactivity.
65. Vertical structural element.
67. O₂ 21%, N₂ 78%.
68. Founded in 1938, Organization responsible for programs of industrial hygiene, education, research.
69. Makes an excellent fertilizer, an ocean weed.
70. Under environmental law _____ liability for a violation means you are automatically guilty and liable, intent does not matter.
71. An electrically charged atom or group of atoms.

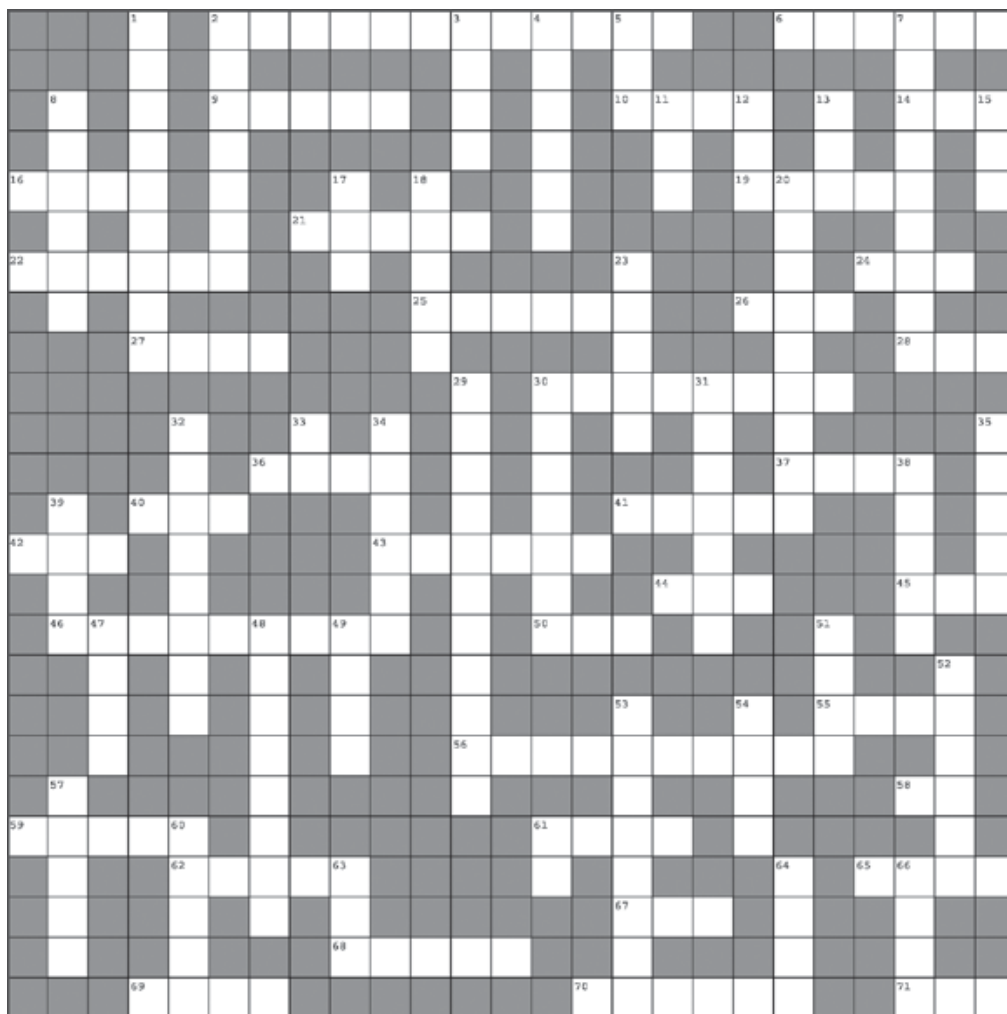
Down

1. Dividing line between effect and no effect levels of exposure.
3. These have the same atomic number of protons but different number of neutrons.
3. World's largest source of voluntary consensus standard for materials, products, systems, services.
4. The "I" in EIS, Environmental _____ Statement.
5. Generates 2200 lbs or more of haz waste

per month or 2.2 lbs of acutely haz waste per month.

7. CERCLA
8. These AQ standards regulate 188 haz air pollutants from particular industrial sources.
11. Reference Dose
12. Submerged offshore ridge or mound of sand or gravel.
13. A facility will strive to comply with regulations to avoid receiving one of these.
15. A layer of clay or other impermeable material installed over the top of a closed landfill to prevent entry of rainwater and minimize leachate.
17. This container gets its name because of it's location in the ground.
18. Man-made watercourse.
20. Taking in by the mouth.
23. City where 160 nations agreed to reduce greenhouse gas emissions.
29. Organism that uses carbon dioxide as its main source of carbon.
30. General conditions in the environment
31. Mass weight per unit volume.
32. Slope of land or water or streambed surface.
33. Colorless, odorless, flammable, and very toxic.
34. Relating to the skin.
35. The _____ point is the lowest temperature at which evaporation of a substance produces sufficient vapor to form an ignitable mixture with air.

38. Rootless plants growing in sunlit waters.
39. Ether compound used to raise oxygen content of gasoline.
47. Air particles less than 10 micrometers in diameter.
48. The product of concentration and time.
49. A corrosive solution with a pH of less than 7.
51. Organic compounds in air that combine with other pollutants to form ozone and fine particulates.
52. The word represented by the "L" in LD50.
53. Chemical that is not corrosive but causes reversible inflammatory effect on living tissue.
54. Amount of a given material or chemical that enters the body in a given period of time.
57. Federal agency responsible for developing recommended health and safety standards.
60. Not chronic, this brief type of exposure to a toxic substance may result in severe biological harm or death.
61. The amount of hazardous waste released from a facility into the environment that must be reported immediately.
63. Established in 1970.
64. Has two meanings but in environmental field its underground
66. Privately funded, voluntary organization, coordinates development of standards.



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 Annual RCRA Seminar was held in May and was a great success. Topics included waste oil recycling, compliance audits and inspections, RCRA basics and waste diversion update from ADEQ. Dan Williams, outgoing two-year SAEMS vice president, will be taking on the SAEMS quarterly highway clean-ups. Stay tuned for our next clean-up coming in September.

SAEMS welcomes Dawn Weyer, Turner Laboratories, as our incoming president. She has served as our president elect for the past year and is ready to assume the leadership. Heather Spitzer, Raytheon, will be our incoming vice president. Derek Koller, Allwyn Environmental, will remain as secretary and Pat Hartshorne, SCS Engineers, will continue as communications coordinator. Barb Ricca, IBM, will complete her second year-term as treasurer. Patrick Harrington, U of A Medical Center will join SAEMS as our president elect.

It has truly been an honor to be president and I wish this wonderful organization continued success! If you are interested in membership or upcoming SAEMS events please visit our website at www.saems.org/.



Heather
Shoemaker
President



WWW.AZAEPP.ORG

The Arizona Association of Environmental Professionals (AZAEP) invites you to our July 23, 2013, meeting at Grimaldi's in Scottsdale from 6 to 8 p.m. The speaker will be Jennie Curé, who will talk about her research on reclamation of agricultural lands using Native grass crop production in the lower San Pedro watershed. AZAEP takes an annual summer break in August; we will start again with speakers at the monthly meeting (fourth Tuesday of the month) on September 24.

ELECTIONS FOR AZAEP BOARD AT-LARGE MEMBERS: There are three At-Large board positions up for election in 2013; the positions are for two years and are self-nominating. Electronic ballots will be sent to all members by the end of June and paper ballot voting will be conducted at the July 23 monthly meeting at Grimaldi's in Scottsdale.

At the May monthly meeting, the new Officers and At-Large member of the AZAEP Board were sworn in: Pat Mariella, President; Mike Dawson, Vice President; Dorothy Hallock, Treasurer; Karl Rains, Secretary; Jennie Curé, At-Large member; Past President, Ali Fakih.

To become a member, join our distribution list 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.**

AZAEP is the state chapter of the National Association of Environmental Professionals (NAEP).

Patricia
Mariella, Ph.D.
President



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SPOTLIGHTING ENVIRONMENTAL EXCELLENCE

Arizona Forward has been showcasing environmental excellence in the region for more than 30 years, recognizing contributions to quality of life and raising the bar for future development.

The organization's Environmental Excellence Awards held in partnership with SRP, sets standards for the exceptional physical, technical and social development of our metropolitan area. The awards



are highly sought by companies both large and small, government agencies, cities and towns, design professionals, educators, media representatives, artists, technicians and others.

Environmental excellence takes many forms, from green buildings, magnificent desert vistas and livable communities to innovative public art, sustainable technologies and environmental education. Sustainable development is more prevalent today than ever and this program has become a powerful vehicle in advocating for the preservation of natural resources – air, water, open space and our unique desert environment.

A new statewide category – Environmental Stewardship (SRP Award) – has been added to this year's program in commemoration of the association's expanded geographic focus.

If you have or know of green initiatives that should be recognized at the 33rd annual Environmental Excellence Awards program at The Phoenixian on Sat., Sept. 14, get your entry in ASAP!

The deadline is fast approaching (July 18). Nomination forms are available at arizonaforward.org or by calling (602) 240-2408.

Diane Brossart
President



ARIZONA
ENVIRONMENTAL
STRATEGIC
ALLIANCE

WWW.AZALLIANCE.ORG

Alliance members and guests attended a half-day Environmental Technical Tour of the Palo Verde Nuclear Generating Station on May 16th. Our hosts

were Marty Eroh, PVNGS Environmental Department Leader, and APS Alliance Representative Neal Brown. Marty led our group (see photo below) on a detailed tour of the impressive facility. PVNGS is partly owned and managed by APS, an Alliance Member.



It is a very important goal of the Alliance to promote environmental leadership and share environmental expertise (mentoring) both within our membership and with others in the environmental community, and these environmental technical tours are one of the ways we accomplish this goal. It is virtually impossible to participate in these environmental technical tours without learning something that might be applicable to our own environmental operations at our individual facilities. We would like to share this experience with a growing number of guests from the environmental management community (that means you!)

We visit a variety of types of sites, both member and non-member facilities, about five or six times per year. If you would like to join us, or perhaps offer to host a environmental technical tour at your facility, please contact me or Jim Thrush (Alliance President) at the Alliance office at 480-422-7392. Have a great summer!

Matt Conway
Chair



ARIZONA CHAMBER
of Commerce and Industry
WWW.AZCHAMBER.COM

The Arizona Chamber of Commerce and Industry and the Arizona Manufacturers Council will hold its annual Environmental and Sustainability Summit on August 22nd and 23rd in Prescott (see advertisement on page 15). This event will include a golf tournament and a full day of presentations on emerging issues in environmental compliance and sustainability. Details can be found on the Arizona Chamber web page at www.azchamber.com.

The Arizona Chamber Environment Committee will hold its next breakfast meeting on Wednesday, July 10th at the Phoenix Sheraton Airport Hotel. Breakfast will be served at 7:00 with presentations beginning at 7:30. For more information on either of these events, go to the Arizona Chamber web page for contact Jeff Homer at 480-441-6672.

Jeff Homer
Chairman
Environment
Committee



Continued on next page

NEW HAZARD COMMUNICATION STANDARD

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELING OF CHEMICALS (GHS)

Hal Berkowitz

The deadline for employers to train employees re the new label elements and the SDS format is December 1, 2013.

The Occupational Safety and Health Administration (OSHA) issued a Final Rule on March 26, 2012 for the Hazard Communication Standard (49CFR 1910.1200), to meet the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The rule was published in the Federal Register /Vol.77, No.58, March 26, 2012. The effective dates for compliance include 12/1/2013 for employers to train their employees regarding the new labeling and Safety Data Sheet format (SDS) and 6/1/2016 for all employers to be in full compliance

DEADLINE:
December 1, 2013

The GHS for Classification and Labeling of Chemicals was initiated in 1992 at the United Nations Conference on Environment and Development in order to insure that chemical safety and health hazards are effectively communicated worldwide by the use of uniform hazard classifications, Safety Data Sheets, and labeling elements that incorporate both uniform text and pictorial hazard recognition.

A total of 10 new Health Classifications and 16 new Physical hazard classifications were added for both individual chemical substances and formulated mixtures, and significant modifications were made in the label elements and safety data sheet format. Incorporating these changes will pose many new challenges to the chemical manufacturers and importers and will affect many other federal and state regulatory agencies.

Hal Berkowitz is Former Director, Office of Environmental Technology, Arizona State University. Hal can be reached at Hal.Berkowitz@asu.edu.

Arizona State University is now conducting 8-hour seminars for the new GHS Hazard Communication Standard at the Sky Song Campus. Instructors will be Hal Berkowitz and Norm Weiss (N. Weiss Associates Inc.).

Contact Denise Kolisar at 480-727-1825 for the class schedule and directions.

ASSOCIATION PAGES

CONTINUED FROM PAGE 8



The Arizona Hydrological Society is pleased to announce several workshops and field trips available for registration at our 2013 AHS Symposium. Workshops will be held on September 18 at our event. Please visit our website for details at www.ahssymposium.org/2013.

Current scheduled workshops include MODFLOW-USG - A New Direction in MODFLOW; Programming for Campbell Scientific Data Acquisition & Remote Data-Collection Systems; and Writing Strategies for Earth Science & Water Resource Professionals.

AHS is also continuing its longstanding tradition of supporting Arizona Project WET (APW) by hosting the annual Teacher's Workshop. APW has grown to be Arizona's leading water education program for teachers and students at all grade levels. APW receives grant funds from federal, state, city, and public and private companies to deliver research-based, quality professional-development workshops for teachers. This funding makes educational curricula and resources that meet the Arizona State Academic Standards available to teachers at no cost to them.

Since 2003, APW has conducted workshops at most AHS symposia. In addition, the teachers typically attend a portion of the symposia talks and the lunch on the workshop day. AHS has historically covered the cost of the workshop room and the teachers lunch.

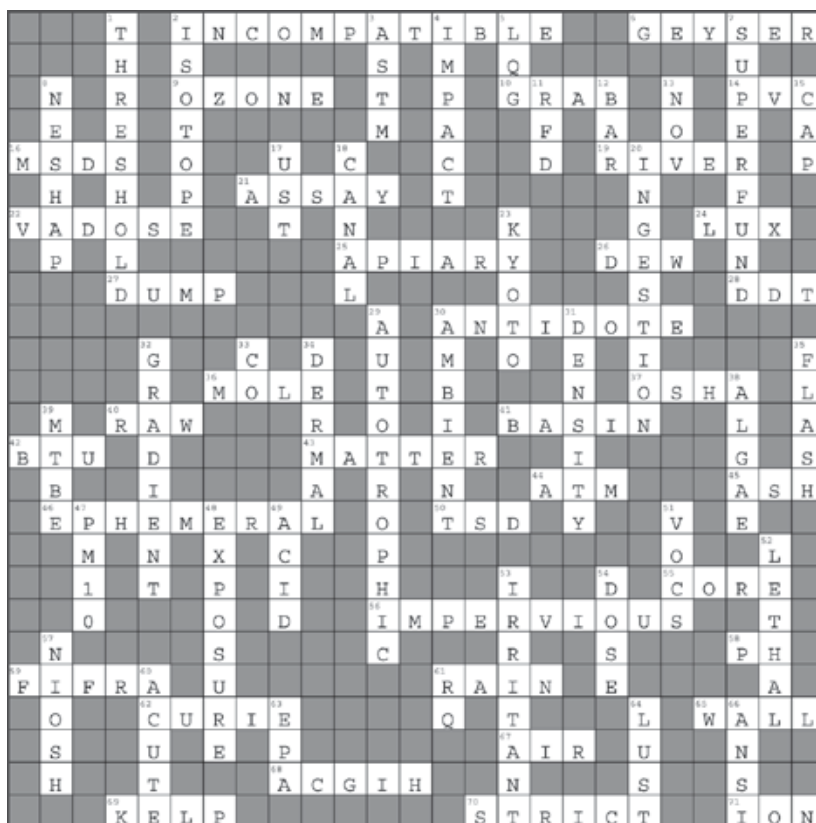
Help Support Our Mission! In the past, CAP grants have been used to pay the participating school districts for the cost of the substitute teachers needed to cover for the workshop attendees. This year, we are appealing to sponsors to cover this cost. Visit <http://ahssymposium.org/2013/> to show your support.

Christie O'Day
Executive Director



CROSSWORD CHALLENGE KEY

PUZZLE IS FOUND ON PAGE 7



NEWS BRIEFS

\$9,000 SETTLEMENT FOR FAILING TO REGISTER STORAGE OF >100 VEHICLE TIRES OUTDOORS

❖ Arizona Department of Environmental Quality officials announced recently that a \$9,000 settlement has been reached with Arlington Land, LLC of Buckeye in Maricopa County for failure to register the storage of more than 100 vehicle tires outdoors with ADEQ.

The Solid Waste Inspections and Compliance Unit (SWICU) inspected the Maricopa County site in May 2010. In addition to the company not registering the tires, "No Smoking" signs were not posted at the site and the company also did not have required fire extinguishers. A Notice of Opportunity to Correct was issued at that time.

After another inspection in July 2010 found no correction of the situation, a Notice of Violation was issued. A later inspection revealed that Arlington had constructed a tire wall as well as met the requirements of the earlier NOV.

The settlement is subject to court approval.

NORTHERN ARIZONA UNIVERSITY RECIPIENT OF \$200,000 EPA ENVIRONMENTAL WORKFORCE DEVELOPMENT GRANT

❖ The U.S. Environmental Protection Agency announced recently the selection of 16 grantees for a total award of \$3.2 million through the agency's Environmental Workforce Development and Job Training (EWDJT) program. The grants support

local work to recruit, train, and place unemployed individuals in jobs that address environmental challenges in their communities. By providing Americans in economically disadvantaged communities with job training in environmental health and safety, EWDJT funding helps protect people's health and the environment while supporting local economies.

"EPA continues to provide communities with funding to deliver valuable job training to individuals living in communities impacted by harmful pollution," said Enrique Manzanilla, Division Director in EPA's Pacific Southwest Region. "This on-the-job training provides Americans struggling to find work with valuable experience while strengthening public health and local economies."

EPA's Environmental Workforce Development and Job Training program, which provides environmental and health and safety training, helps graduates develop a broader set of skills that improves their ability to secure short-term contractual work, as well as full-time, employment in the environmental field. Program graduates acquire training and certifications in a variety of areas, such as environmental health and safety, lead and asbestos abatement, landfill management, wastewater treatment, brownfields assessment and cleanup, Superfund cleanup, leaking underground storage tank removal, recycling and emergency response.

Northern Arizona University in Flagstaff, Arizona is a recipient of one of the \$200,000.00 grants and plans to train 36 students and place 35 graduates in environmental jobs. The university is targeting unemployed residents of the Navajo Nation, particularly those living in communities impacted by uranium mining and cleanup activities. Key partners include the Navajo Nation Department of Workforce Development, Navajo Nation EPA, Navajo Nation Office of Economic Development-Church Rock and Shiprock Chapters, and Navajo Nation Council Delegates.

As of May 2013 more than 11,000 Americans have completed environmental workforce development and job training, of which, more than 8,000 have obtained employment in the environmental field with an average starting hourly wage of \$14.12.

EPA FINES PHOENIX LAMP RECYCLER \$71,500 FOR PCB VIOLATIONS

❖ The U.S. Environmental Protection Agency announced recently that it has settled with Lighting Resources, LLC for \$71,500 for violations relating to its handling of PCBs (polychlorinated biphenyls) at its Phoenix, Ariz. recycling facility.

"Exposure to PCBs is a concern whenever facilities are handling materials containing these toxic chemicals," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "Our goal is to safeguard worker health and nearby communities by ensuring that Lighting Resources takes the necessary steps to improve the safety of their recycling and disposal practices."

The facility is permitted under the

N. Weiss Associates, Inc.

Environmental Compliance Services

Experience Counts

Contact: Norm Weiss @ (602) 870-5504

Web Site: www.nweissassoc.com

Toxic Substances Control Act (TSCA) to manage and store PCB wastes. Separate permits allow the facility to recycle fluorescent lamps and ballasts, batteries, electronic wastes, and mercury devices. The facility also manages non-PCB ballasts, phosphorous powders, aerosol cans, and mercury containing wastes. The company operates facilities in five states and is one of the nation's largest ballast processors.

EPA inspections in 2008 and 2012 found that the Phoenix facility had not effectively decontaminated its PCB handling area, documented the transport and disposal of PCB-contaminated materials, or properly labeled PCB and hazardous waste containers.

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.

ADEQ RENEWS, IMPROVES STORMWATER CONSTRUCTION PERMIT

❖ Arizona Department of Environmental Quality officials announced recently that a revised stormwater construction general permit is available which will streamline the process of water quality monitoring and provide a standardized site inspection form.

The permit is required under the federal Clean Water Act, and as part of the Arizona Pollutant Discharge Elimination System program, for stormwater discharges from construction activities that disturb one acre or more. The permit is also required for construction sites less than one acre if they are part of a larger, common plan of development.

"We are continuously looking for ways to reduce unnecessary and time-consuming red tape, while maintaining the same or higher level of environmental protection," said ADEQ Director Henry Darwin. "This improved stormwater permit is another example of how our agency is reaching that goal."

One new aspect of the permit allows for submittal of a notice of termination if a demonstration can be made that stormwater discharges from the site don't result in additional pollution from construction activity.

Documents about the permit, which became effective on June 3, are available at: <http://www.azdeq.gov/environment/water/permits/cgp.html>. To obtain a permit, a paper Notice of Intent (NOI) form can be submitted or the NOI form can be submitted electronically at: <https://az.gov/app/smartnoi/>.

For more information about the stormwater

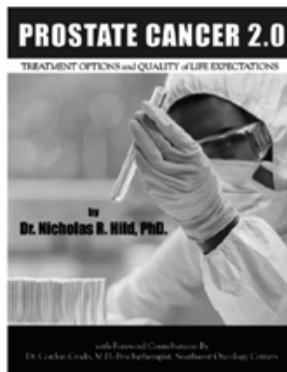
construction general permit, contact Christopher Henninger at (602) 771-4508 or cph@azdeq.gov.

US EPA REQUIRES ADOT TO REDUCE POLLUTION FROM STORMWATER RUNOFF

❖ The U.S. Environmental Protection Agency has reached an agreement with the Arizona Department of Transportation (ADOT) to improve the state's stormwater management program as part of EPA's national effort to reduce pollution of waterways by runoff from cities and statewide transportation agencies. ADOT manages 18,000 travel lane miles across the state, and stormwater runoff from its roads and maintenance facilities contain pollutants such as metals, sediment, oil, grease, pesticides and trash.

ADOT voluntarily addressed many of EPA's concerns by enhancing its

Continued on page 14



"Dr. Hild's research has shown that men diagnosed with PC are unlikely to seek out treatment options because they just don't want to deal with it. This book provides the essential decision-making elements that help them make the right treatment choice that will determine what a man's quality of life is forever after!"

Dr. Gordon Grado, PC Oncologist

Based on hundreds of case studies, interviews of PC patients before and after treatment, and refereed Journal studies published in Journals endorsed by the American Medical Association, **this book explodes the myths about quality of life and longevity after treatment for the most popular prostate cancer (PC) treatment regimes administered over the past 15 years, including:**

- Which treatments should be considered for men diagnosed with early stage PC;
- Why PSA is essential as a screening tool for men 40 years and older;
- Why a Radical Prostatectomy is no more effective for survival than other treatments;
- Why a man's quality of life after treatment should be a most important consideration;
- Which treatments have sexual dysfunction and urinary incontinence for months or years.

For the man who's been diagnosed with PC, this book is essential to the decision-making process that will effect quality of life after treatment for the rest of his life!

Journal readers order direct: Mail a check for \$10.95 payable to Nicholas R. Hild, PhD. to: N.R. Hild, P.O. Box 19955, Fountain Hills, AZ 85269. To order online: follow the directions at www.worldsleadingexpert.com. Order direct from Infinity Publishing online at buybooksontheweb.com (\$13.95 + shipping) or order online from Amazon.com or BarnesandNobel.com



Nicholas R. Hild, PhD.

ADVANCING SUSTAINABILITY USING TOMS METHODOLOGY

The older you are, the more likely it is that you have avoided using social media like Twitter and Facebook to stay connected and to know you are “liked” by hoards of people you’ve never met. But, much as those forms of communications are time-wasting (company-time-wasting, that is), there is a lot to be gained by utilizing social media to advance environmental causes.

It is certainly true that the future is going to be in the hands of millennials and generations X and Y so there needs to be a recognition that social media in all its forms will be the mass-media *vehicles* that marketers of sustainability (‘solutions’) *must* use if global warming and alternative energy and all the critical environmental issues that impact *their* future (and *their* children’s children) are ever to become mainstream issues that are not controlled by short-sighted politicians.

Just ask Blake Mycoskie, founder of the TOMS footwear company who learned that one of the key ingredients in making his business a success was utilizing social media to tell his story to the widest possible audience in the shortest amount of time. In his illuminating 2011 book, *Start Something That Matters*, Mycoskie puts it this way:

“...the way companies introduce themselves to customers has changed. They can no longer rely on simple, straightforward ad campaigns like they did...in the television era portrayed on such shows as Mad Men... (today) the media are much more divided (and) people are no longer listening to or watching the same few radio or TV stations each week (as they did when there were only three network channels). They are following... Twitter, commenting on blogs, channel surfing over 500 TV stations, watching Hulu, clicking on YouTube, reading Kindles and Nooks, and surfing iPads...sometimes all at the same time!”

Recent studies have shown that today’s younger generation (and politicians who want to use environmental “science” for their own purposes), are not impressed by facts and statistics. And, our politicians are especially skeptical when it comes to studies that show our ever-increasing man-caused carbon footprint is heating up the environment. Mycoskie puts it this way:

“...(today)... facts are neutral until human beings add their own meaning to those facts. People make their decisions

based on what the facts mean to them, not on the facts themselves. The meaning they add to facts depends on their current story... facts are not terribly useful to influencing others...”

TOMS footwear (shoes) business began after Mycoskie went on a sojourn to Argentina and saw almost everyone in the country wearing incredibly versatile canvas shoes called the *alpargata*, a soft, casual canvas shoe that was worn by farmers, polo players, students...everyone seemed to be wearing them...it was the “national” shoe in Argentina.

So, when he returned to the U.S. he had this idea for a new business kicking around in his mind about selling a modified version of the shoes he’d seen, only with a leather sole to make them more durable for the U.S. market. But, how to market them became his biggest challenge... until he remembered that the children he’d seen in the poorest areas in his travels across Argentina were mostly bare foot and suffering with sores and blisters because they could not afford shoes. Viola! His TOMS business was born with a simple business plan: for every pair of TOMS shoes sold, a pair would be provided free to a child in Argentina who needed shoes.

And after a year of trying to market his TOMS shoes in the U.S. market, he had only marginal success using traditional advertising tactics...until, he used the internet’s social media power to tell his story (about donating a pair of shoes to needy children in Argentina for every pair sold). Overnight, his shoes were in demand from internet ‘friends’ across the globe! And, although Mycoskie’s story is a little more complicated than that---you will need to read his book to understand just how this worked for him--- but, you will be amazed how TOMS story demonstrated the extraordinary power of social media to move people to action!

For our purposes, the TOMS lesson is this: it is time to begin using the internet and all its social media capability, to really make a difference in addressing global environmental issues. It’s time to utilize the vast domino networking power of “friends” and followers to spread the message---Mycoskie calls that ‘*telling your story*’ but the sustainability “*story*” has many different themes and each can start a movement, if its broadcast correctly. That *story* needs to be focused on the many ways environmental sustainability---in all its forms---alternative fuels, global warming, air pollution, water pollution; etc---can be addressed so that future generations will not be able to point their fingers back to the early 2000’s and ask why we didn’t solve those problems before it was too late.

If too much ‘science’ thrown into the mix of doomsday statistics doesn’t impress the people who are the movers and shakers that can make politicians stand up and take notice, then *tell the story* in the way that gets the attention of large numbers of people. That way, **YOU** become a mover and shaker taking advantage of the power of the social media. We already know that TV media (and internet’s YouTube, too!) love crowds who have a cause and those kinds of gatherings get the attention of politicians who need to know there are serious environmental problems that need addressed today!

TOMS became successful because it started with a simple idea. Let’s use that same simple plan to focus our internet social media power on global warming and the future environment we leave for our kids (i.e. “*we*” now includes *your* children’s, children). In the words of Mahatma Gandhi, you can “*...be the change you want to see in the world*” because, a sustainable future just might be the most important *social* cause of our times! So listen to the TOMS story and *really* make a difference by utilizing social media to truly make the world a better place for *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.

SAEMS AND RCRA: NEXT GENERATION



Photo Above: SAEMS 2013 RCRA Seminar Committee Members.

Front row, Left to Right: Shri Parikh, Barb Ricca, Sarah Sillman, Lisa Cuestas.

Back row, Left to Right: Dave Mack, Derek Koller, Frank Bonillas, Pat Hartshorne, Heather Shoemaker, Ken Asch.



The Southern Arizona Environmental Management Society held its annual RCRA Seminar, "SAEMS AND RCRA - Next Generation" on May 9th, 2013, at the Tucson Holiday Inn Hotel & Suites. The day-long seminar (see photos this page)



included feature speakers with RCRA refresher and update information, a great luncheon, and vendor/exhibitor booths. Attendance was very strong this year with many new faces in the crowd! For more information visit SAEMS at www.saems.org



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NEWS BRIEFS

CONTINUED FROM PAGE 11

program with the addition of new positions in its Office of Environmental Services, and by mapping its storm drain outfalls and roadside water filters. Detailed mapping allows the state to predict where flows will go and how best to contain them, information critical in emergency situations such as tanker truck spills. The agreement requires ADOT to conduct additional corrective measures and establishes a series of compliance dates to resolve by March 2014 the remaining findings of an EPA audit.

"The protection of surface waters is a priority in a desert environment, and cutting stormwater pollution from roads is a key

goal under the Clean Water Act," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "We are confident the progress ADOT has taken thus far, along with the actions they commit to in this agreement, will improve water quality throughout Arizona."

Today's agreement is the result of EPA's week-long audit in October 2010, which evaluated ADOT's compliance with its municipal stormwater permit. The audit included inspections of 57 ADOT construction sites and maintenance facilities in four districts encompassing Phoenix, Flagstaff, Tucson and Prescott, and included document reviews, interviews and field verification inspections. The permit was issued by the state of Arizona under the Clean Water Act to protect the state's water resources from polluted runoff.

Water pollution degrades surface waters, making them unsafe for drinking, fishing, and swimming. Specifically, stormwater runoff is a primary cause of water quality impairments. Under the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits regulate the discharge of pollutants, including municipal and industrial stormwater runoff, into waters of the United States.

Since 2001, EPA's Pacific Southwest Region has conducted numerous audits of municipal stormwater programs, including state transportation agencies, to evaluate program effectiveness and assess compliance with their permits.

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