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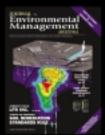














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From the Editor



his issue's cover shows thumbnail images of all of our past covers and is a reminder of the many articles and columns and photographs that we have published over the years, and of the many writers and contributers that have been such an important part of the Journal. I would like to thank each of you who have contributed to the Journal over these past years, and

our readers and advertisers, who have helped make the Journal so successful!

A few statistics: the Journal is now in our fifth year of publication, with approximately 33 current advertisers, and a circulation of nearly 3400. Readership, based on an informal survey of some of our readers, may be about double that, with about 2 readers for each copy of the Journal.

Advertising: I have often promoted advertising in this column because, first, it is essential to keeping the Journal in business, and second, because while many businesses have decided to include the Journal as part of their business marketing plan, some others have not yet made that decision. If you are considering advertising in the Journal in 2007, please give me a call! It is an investment worth making!

Year Five: In the upcoming year we will continue to bring you articles on a variety of environmental and safety topics. Please continue to keep us informed on what topics you would like to see in the Journal. If you have articles you would like to write, or photographs you would like to see published, please call me or send an email. Thank you! (Phone: 480-422-4430 x42, or email at jimthrush@cox.net).

Jim Thrush, M.S. Environmental Management

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ARIZONA

February / March 2007

Volume 5 Number 1

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Arizona Performance Track

Broadening the Base and Improving Incentives

by Steve Owens, Director Arizona Department of Environmental Quality

he Arizona Performance Track program is a voluntary partnership between ADEQ, the air quality departments of Maricopa, Pima, and Pinal counties and businesses that recognizes and rewards environmental leadership. The program is designed to encourage companies to go above and beyond the minimum requirements of the law and provide benefits and recognition to those who do.

Membership in Arizona Performance Track automatically confers membership in EPA's Performance Track, on which the program is based.

Two of Arizona's most innovative companies helped launch the Arizona Performance Track by joining as the program's



Steve Owens, Director Arizona Dept. of Environmental Quality

inaugural members: Intel Arizona's Ocotillo Campus in Chandler, and Ping, Inc., in Phoenix, which designs, manufactures and services golf clubs and other golfing equipment. Both companies have announced plans to reduce waste generation and conserve resources.

In addition, Scottsdale became the first city to join Performance Track and is being recognized for committing to add

1,200 acres of land and habitat to the McDowell-Sonoran Preserve, reduce non-transportation energy use, use biodiesel in the city's fleet of diesel vehicles, replenish the underground aquifer with treated effluent, and construct future buildings to conform

to the energy-efficient Leadership in Energy and Environmental Design (LEED) standard.

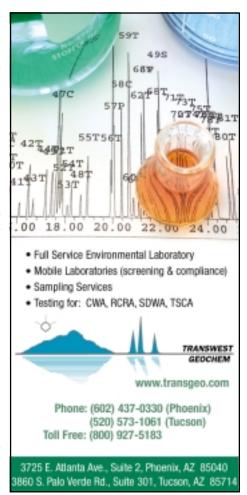
The Arizona Performance Track is off to a great start thanks to Intel, Ping and Scottsdale, and ADEQ is presently involved in discussion with a number of other major Arizona companies about joining the program. As we enroll more large companies in the Arizona Performance Track, we also are working to broaden the range of business sectors involved in the program.

For example, many small businesses and communities want to join Performance Track, but lack the technical, managerial or financial resources to qualify for membership. ADEQ is developing guidance and templates for Small Community Environmental Protection Plans under a new ADEQ policy based on EPA's recently modified Small Community Policy. By modifying these guidance and templates to meet Performance Track standards, ADEQ can make it easier for qualified small businesses and communities to apply for membership.

Moreover, at the suggestion of agriculture interests, ADEQ is exploring the creation of an Agricultural Performance Track that would provide Performance Track benefits to regulated entities involved in agriculture. We are meeting with the agricultural community and the agencies that regulate them to gauge the level of interest and identify opportunities for environmental

improvement and regulatory incentives that might be offered. Benefits flowing to the public from these improvements to the program will include reductions in waste generation, water and pesticide use.

Other sectors also may benefit from participation in the Arizona Performance Track program, and ADEQ would be delighted to explore ways to make the program more inclusive. Arizona Performance Track is clearly a win-win for the regulated community and the public.



OSHA Documentation: CYAWP

Documentation is Critical!

"I know an insurance agent who was running late for a meeting and got pulled over by the police. She got a ticket for speeding, but to make matters worse, and perhaps a little embarrassing, she was also cited for not having proper documentation; she didn't have her proof-ofinsurance."

Chuck Paulausky, CHMM

ocumentation is as critical to safety compliance as it is to environmental compliance. OSHA regulations have many requirements for documenting the whowhat-where-when-why-how of your company's safety program.

We're all familiar with Material Safety Data Sheets: Documentation of chemical hazards required by OSHA from chemical manufacturers in the Hazard Communication Standard 29CFR 1910.1200. The HazCom standard also requires the user have a list of the chemicals used and to have an MSDS on hand for every chemical. These can be in a digital form, as long as all employees have immediate access at all times with no barriers. Note: If digital MSDS's are maintained as the only access, the computer system should have battery-backup in the event of a power outage to ensure 24-hour access.

Employees must be trained in using and understanding the information on the MSDS, with the training effective and documented. The same applies for all of the numerous OSHA training requirements. If the training isn't documented, it didn't happen. Some training requirements include using "qualified" instructors. It's a good idea to document those qualifications. OSHA requires employers to evaluate workplace hazards. The Job Safety Analysis process provides a great way to do this using standard forms to document the evaluation and control process. A JSA may involve exposure monitoring to determine if employees are being exposed to certain chemicals beyond the exposure limits. Many OSHA standards require this monitoring. OSHA also requires that the monitoring be documented, and that the tested employees be informed of the results, also documented.

Medical evaluations required under a number of OSHA standards must also be documented. Examples can be found under the bloodborne pathogen (Hepatitis B, HIV). hearing conservation (audiometric testing), respiratory protection (pulmonary function), and a number of chemical-specific standards, i.e., Cadmium, Lead (initial and periodic blood/urine tests).

OSHA has many requirements for written plans, another form of documentation. The HazCom standard requires a "written hazard communication program," as do the Respiratory Protection, Hearing Conservation, Confined Spaces, and many other standards.

Some requirements don't require a written program, but are loaded with documentation requirements. The Lockout/ Tagout standard is a good example. No "written program," but you must document equipment-specific energy control procedures, periodic inspections/evaluations, training, etc. How long should you keep all this documentation? Some of the standards have specific retention requirements. MSDS's must be current and available as long as you have the chemical on-site. Exposure monitoring records must be retained for 30 years. In general, for employee-specific records, i.e., monitoring, training, medical evaluations, etc., I recommend keeping these forever. You never know when an employee will develop some condition 50 years from now and blame it on the chemicals to which you exposed them.

Read the regulations that apply to your operations carefully to determine your documentation requirements. But, for the sake of employee safety, OSHA compliance, and longterm company liability, I recommend that you document everything- CYAWP: Cover Your A##... With Paper.

Chuck Paulausky, CHMM, is President of CPSE LLC, a consulting firm specializing in OSHA and EPA compliance for small to mediumsized businesses. Chuck can be reached byphone at: 480-694-1975, or by email at cpaulausky@cpsafety.net.





Competitive Advantage:

A Good Reason to Adopt EMS?

An evaluation of the competitive advantage aspect of adopting an EMS at Printech International's printing facility

J. Andy Soesilo, PhD, REM Professor, Western International University

Printech International started its operation as a small printing facility in Dublin's city center in 1978. This 360-employee printing company is now a major supplier of printing materials for big corporations including IBM, Apple, Dell, Lotus, Microsoft and Claris. Printech's multinational customers are known to require their suppliers to comply with high standards of quality, reliability, and environmental regulations. Customer requirements, combined with Printech's genuine concern about the environment, led to the decision to establish an Environmental Management System (EMS). In 1996 Printech's EMS was certified to ISO-14001.

QUANTIFYING COSTS AND BENEFITS

Following the adoption of its EMS, Printech was able to identify and solve a wide range of environmental problems but has found it difficult to quantify the costs and benefits associated with their EMS. An obvious benefit to Printech is that it is aware and sometimes even ahead of planned legislation and has the controls in place to ensure compliance with environmental regulations, so that compliance becomes more or less automatic. The company's objective remains maintaining and enhancing its position as one of Europe's most environmentally responsive printing firms.¹

Although Printech is not able to quantify the results of its EMS, it recognizes its competitive advantage over its peers. Competitive advantage exists when a company has a product or service that is perceived by its customers as better than that of its competitors. It is an attribute that separates the company from the rest. Printech is not alone, however, because many companies do have difficulty in evaluating the costs and benefits associated with EMS.

COMPETITIVE ADVANTAGE

When we consider all things being equal (cost of production, quality, and flexibility), then a company with an EMS will hold a competitive advantage over rivals that don't have it. As Sroufe et al. (1998) propose, companies that decide to implement an EMS will have a unique resource positively associated with enhanced quality, lead times, lower costs, and thus competitive advantage.²

The fact is that the adoption of EMS necessitates the development of procedures and the implementation of EMS requires that the procedures must be executed and repeated regularly. The benefits of an EMS emerge when the process of implementation is

successfully completed and the company manages to absorb the specific procedures required by EMS. At this juncture the company may already have developed valuable competencies and more reliable resources inside the organization. This internal strength represents a solid foundation upon which competitive advantage can be built.

As Sinding (2001)³ observes, the EMS implementation can change the way the company manages its relationship with the natural environment. He argues that depending on the extent to which the company's internal resources can be extended and conserved, emphasis may shift from an internal pollution prevention effort towards life cycle oriented environmental management. This includes looking beyond the boundaries of the organization to other parts of the supply chain of which the company is part. Thus, the logical sequence following EMS is the quest for a lean enterprise for the achievement of stronger and sustainable competitive advantage.

The concept of "lean" advocates the idea of delighting the customer through a continuous stream of value adding activities (Lucansky and Burke, 2003)⁴. This means that the term lean enterprise is closely associated with added value, whereas value is defined from the customer's perspective.

LUCENT TECHNOLOGIES / LEAN ENTERPRISE APPROACH

Lucent Technologies provides an example of a lean enterprise approach. In this case, the company's wireless business unit develops and successfully implements the so-called "product-based EMS". Through this EMS, hardware design innovations are employed to meet more stringent legal and customer eco-environmental requirements. Specifically, the company addresses the impacts of wireless hardware products on the environment throughout their entire life-cycle, no matter where they are developed. By committing to this lean thinking philosophy, Lucent has added the competitive advantage of its products over its rival's products without "green" characteristics (Greener Management International, 2004)⁵.

J. Andy Soesilo, PhD, REM, is a Professor at Western International University. Andy can be reached by email at asoesilo@wiu.mailcruiser.com.

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Is it Prudent to El iminate Emergency Management?

NOTE..

Recently Daniel Roe, Executive Director, Arizona Emergency Response Commission, brought the following letter to my attention and suggested it might be of itnerest to our readers. I agreed with Dan, and with the author's permission, we are presenting the letter here. EDITOR

Bob Berry, CEM, Associate Professor of Emergency Management at Western Carolina University (Letter first published in the Asheville Citizen-Times Opinion Page, September 24, 2006) problem is the need for improved communications, more effective mitigation and preparedness through better planning, training and exercising in order to provide effective coordination of resources at the state and local level. If the public is to be expected to, and be able to, protect themselves, they must be shown how and why. The emergency management organizations have been doing this for decades, but they have not been given the full support and recognition in these efforts for many political reasons.

It is long past time to put the political issues aside, put the disaster symptoms aside, and to address the real problem, which is the shortage of support and resources dedicated to build an effective emergency management structural system or mechanism in the United States. This can and should be done by listening to the input of suggestions, recommendations, etc. of professional emergency management practitioners and academicians. These recommendations should be made into policy and implemented into action that is practical and effective in addressing the multi-hazard or all-hazard approach to emergency management which addresses all of the hazards that every state and local community must face on a daily basis, not merely terrorism alone.

Relegating the entire emergency management function

Continued on pg 23

In the front-page article, "N.C. now better prepared for worst," (AC-T, Sept. 10, 2006), by Kerra L. Bolton, Daniel Ostergaard, Senior Policy Fellow at Western Carolina University and former Executive Director of the U.S. Homeland Security Advisory Council, was quoted as saying, "The states really have 50 separate and distinct ways of looking at Homeland Security. Some states view it as a law enforcement function while others look at it from an Emergency Management function. I don't know if there's a definite right way to do it yet."

I submit the view that it is not a matter of identifying a "definite right way;" however, there is a mistaken way, which is emphasizing the law enforcement function at the expense of reducing a more effective way, which is the emergency management components.

The same article identified four states (Indiana, Louisiana, New Hampshire and Wyoming) that have decided to "repeal their entire existing emergency management statutes and replace them with new agencies." This could well be a major mistake. If it is the intent of these four states to obtain large Homeland Security grants by changing the name, emphasis and priorities of their emergency management mandate, it is a travesty.

Reinventing the wheel for political purposes is not going to address the problem. The



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news briefs

ETC Compliance Solutions Opens Training Center in Phoenix

TEC Compliance Solutions announced recently that it is celebrating its 15th year in business with the opening of its new Training Center in Phoenix.

The new center is located at $24^{\rm th}$ Street and I-10 by Sky Harbor airport. Training classrooms are equipped with state-of-the-art audio visual equipment, comfortable student seating, a full kitchen

and lots of space to conduct hands-on training scenarios indoors.

ETC also announced that Matt Brunkow, MS, CSP, CHMM, has been promoted to Operations Manager and Mary Pickett, RSO, formally with the AZ Mine Inspector's Office, joins ETC's professional staff as an instructor/consultant. Ms. Pickett's extensive MSHA background enhances ETC's ability to respond to the increased need for MSHA training and consulting.

ETC Compliance Solutions provides Safety and Environmental open enrollment and on-site training, consulting and management services. ETC

maintains a website at www.e-t-c.com and can be reached at 602-928-9673.



Matt Brunkow Operations Manager, ETC



Mary Pickett Instructor/Consultant, ETC

U.S. EPA Solicits Environmental Award Nominations

The U.S. Environmental Protection Agency is encouraging citizens in California, Arizona, Nevada, Hawaii, and the Pacific Islands to nominate a friend, peer or organization for this year's U.S. EPA Environmental Awards program.

The program, now in its ninth year, seeks to recognize individuals and groups outside of the U.S. EPA who made significant contributions to improve the environment in the year 2006. **Anyone can be nominated**, such as scientists, teachers, journalists, citizen activists, young people, organizations, business representatives, public officials and others committed to protecting public health and preserving our natural surroundings.

Entries will be judged on the following criteria:

- promotion of innovative ideas, techniques, and/ or technologies
- ability to address an environmental problem or need
- accomplishment of stated goals
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or widely shared

- collaboration with others
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Nomination forms must be submitted online no later than February 16, 2007. An EPA panel will review all of the applications and select this year's finalists, who will be notified by mid-March. Winners will then be recognized at a ceremony to be held in San Francisco mid-April.

For more information and to submit a nomination form online, visit: http://www.epa.gov/region09/awards. For questions regarding the program, please call the Environmental Information Center at (866) EPA-WEST or Wendy Chavez at (415) 947-4248.

ADEQ Orders Wil hoit Water Company, Yavapai Estates, to Correct Arsenic Water Quality Viol ations

Arizona Department of Environmental Quality Director Steve Owens announced recently that ADEQ issued a Compliance Order to Wilhoit Water Company-Yavapai Estates in Chino Valley requiring the company to provide an alternative source of drinking water directly to customers because the water that Wilhoit is currently supplying contains unsafe levels of arsenic.

On December 5, ADEQ issued a Notice of Violation

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(NOV) to Wilhoit for serving drinking water to customers with arsenic concentrations more than 30 times the federal standard. On December 13. ADEQ posted a public notice that advised customers to avoid drinking or cooking with water from the Wilhoit-Yavapai **Estates** system, and to find an alternative source of drinking water.

ADEQ issued Compliance the Order today because Wilhoit Water Company has failed to provide its customers with safe drinking including water, bottled water, and failed to inform customers about the arsenic levels.

The company has three days to begin supplying bottled water directly to customers, five days to issue a public notice through the U.S. Mail to its customers, 30 days to submit a proposal to bring the system into compliance with the federal arsenic standard, and until June 1, 2007 to achieve compliance with the standard.

"This company has an obligation to its customers to provide them with safe drinking water," Director Owens said. "They must do so immediately."

Drinking water samples taken from the system exceed federal arsenic levels. The most recent analytical result for a sample collected was 316 parts per billion (ppb). The Environmental Protection Agency (EPA) arsenic standard for drinking water is 10 ppb.

EPA has determined that long term exposure to arsenic may lead to cancer of the bladder, lungs, skin, kidneys, nasal passages, liver and prostate. Other effects may include thickening and discoloration of the skin, stomach pain, nausea, vomiting, diarrhea, numbness in hands and feet, partial paralysis and blindness.

Customers with questions or concerns should contact the Wilhoit Water Company at (928) 639-1308 or may contact ADEQ at (602) 771-4644.





Crossword Chal I enge:

Theme: Environmental Key Words

Here is our 3rd EH&S Puzzle, and our 2nd Environmental Key Word Puzzle. Please let us know if you like this new feature. Do you want to see more EH&S related puzzles? Was this too easy? Too hard? Not interested? Let us know! 480-422-4430 x42. Thank you!

6. The addition of hydrogen, removal of oxygen,

or addition of electrons to an element or compound.

9. Measure of oxygen required to oxidize all

10. A wall or plate placed in an open channel to

11. Emission limit based on maximum reduction

14. This heavy metal can accumulate in

16. Describes waste domestic wash water from kitchen,

18. Advisory group of scientists and professionals

that make recommendations for radiation protection

20. This type of generator faces the most regulations.

bathroom, and laundry sinks, tubs, and washers.

achievable through available methods

environment and is highly toxic.

7. Microscopic organism

compounds in water

measure flow of water.

Across

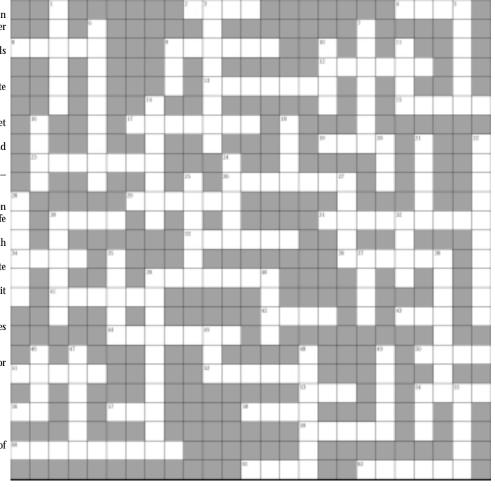
- 2. Stronger than a breeze, less than a storm.
- 4. Air pollution associated with oxidants
- 8. Unwanted sound
- 9. Glass bottle protected by a plate
- 12. Crust formed after a caustic chemical or heat injury
- 13. High velocity powerful wave.
- 15. 100,000 Btu
- 17. Study of Earth's physical history.
- 19. The concentration of a substance at which exposure produces no evidence of injury or impairment
- 23. Not formed by biologic processes.
- 26. Sterile.
- 29. Injury brought about by an outside force
- 30. Unarousable unconsciousness
- 31. Device for measuring air velocity
- 33. Type of fuels derived from ancient organic remains.
- 34. A deduction of weight, made in allowance for the weight of a container or medium
- 36. Large group of similar cells forming a structural component
- 39. Particles suspended in air
- 41. Has definite volume, no definite shape
- 42. 10 to the 3rd power.
- 43. Maximum allowable exposure set by OSHA.
- 44. Relationship of living things and environment
- 50. The P of IPM, Integrated Management
- 51. Metal mixture
- 52. Any substance that emits radiation
- 53. Form of H2O found on plantlife at lower temperatures.
- 54. To cut or eat away material with acid or another corrosive substance
- 56. This heavy metal can accumulate in environment and is highy toxic.
- 57. ACGIH's advisory biological limit value
- 58. Dry Arizona river
- 59. Automobile emissions test, takes up to 240 secs
- 60. Reducing degree of pollution
- 61. Tiny particles trapped in vapor or in a gas stream.
- 62. Relating to life

Down

- 1. pH below 7
- 3. Promotes biological degradation of organic matter in water
- 5. Ion detecting counter

- 21. This form of a common gas is hazardous at ground level, but it is useful the stratosphere.
- 22. Uptake of water into a cell or organism.
- 24. Standards established by EPA that apply for outdoor air throughout the country.
- 25. Substance that resists change in pH
- 27. Impure flint used in abrasives
- 28. Bundle of radiation
- 30. It's nickname is Superfund
- 32. Quantity of matter
- 35. Watt-second
- 37. Very hazardous atmospheres in which employee exposure can cause serious injury or death
- 38. Wastewater that flows out of a treatment plant, sewer, or industrial outfall.
- 39. Condensation on the surface of solids
- 40. Inland body of standing water
- 45. Used as fuel.
- 46. Fuel element for a nuclear reactor
- 47. Magnitude of force times distance of application
- 48. Proliferation of a marine plankton toxic and fatal to fish
- 49. Measurement of particle in atmosphere
- 54. One dyne acting through one centimeter
- 55. Severe cramping pain in or around the abdomen

Answers: Find the KEY to this puzzle at www.ehshomepage.com. The Link is at bottom of the homepage.





Michael C. Ford, Attorney

Regul atory Devel opments

Compliance Deadline Reprieve for TSCA IUR and SPCC

ecember 23, 2006 was the reporting deadline for chemical manufacturers covered by the Chemical Inventory Update Rule (IUR) under the Toxic Substances Control Act. However, if you missed it, you are in luck, as EPA extended the deadline on the eve thereof until March 23, 2007 to allow the regulated community more time to prepare their reports, particularly those manufacturing inorganic substances, which are subject to the reporting requirements for the first time.1 Many companies subject to reporting may have overlooked the IUR deadline, since the reporting requirements have arisen only every four years, and the scope of the program was expanded several years ago, after the last reporting period.

Under the new rule, manufacturers (defined to include importers) of inorganic as well as organic chemical substances during 2005 in quantities greater than the 25,000 lbs. per site threshold, are subject to "basic" reporting requirements. In addition, manufacturers exceeding the new 300,000 lbs. threshold for organic chemicals are required to report more detailed information on the exposure of workers and consumers to the chemicals. The IUR information is designed to be used by EPA to evaluate and prioritize chemicals for possible further review and regulation under TSCA, but manufacturers should anticipate IUR data being reviewed and publicized by citizens groups for their own purposes (similar to TRI reporting data), which will present a public relations challenge for those reporting, particularly those reporting detailed exposure information.

The IUR was amended in 2003, significantly broadening the universe of reportable chemicals by adding inorganics to the list, and increasing the level of information required to be reported for each covered chemical. The IUR regulations require manufacturers of chemicals on the "TSCA Inventory" (there are over 75,000) subject to "basic" reporting requirements, to report the number of workers reasonably likely to be exposed to the chemical substance at the site of manufacture or import; the physical form(s) of the chemical substance as it leaves the submitter's possession, along with the associated percent production volume; and the maximum concentration of the chemical substance as it leaves the submitter's possession.

For chemicals manufactured at a volume of 300,000 pounds or more per site, manufacturers must report additional information including regarding the type of industrial processing or use operation at downstream sites; the estimated number of workers reasonably likely to be exposed to each chemical substance at all sites at which the chemical is used or processed; the commercial and consumer uses of reportable chemical substances, including an indication of whether the products are intended for use by children; the maximum concentration of the reportable chemical substance in each commercial and consumer product category; and the estimated percentages of the submitter's production volume in each industrial function category and commercial and consumer product category.

The reporting forms and additional information is available at www.epa.gov/opptintr/iur. Be forewarned: the regulations are complex, contain numerous exemptions, and the reporting forms may require a substantial dedication of resources to prepare. Potentially affected manufacturers (and importers) should be aware that additional deadline extensions are unlikely, so time is running out to meet the IUR requirements.

Speaking of deadlines, EPA announced on December 26, 2006 its proposal to extend yet again the deadline for compliance with the amended SPCC regulations (currently October 31, 2007).2 The amendments were originally published in July, 2002, but the compliance deadline has been extended several times as a result of litigation settlements and subsequent regulatory amendments generated by the various complex and contentions interpretation issues raised by the amendments. In fact, on the same date EPA proposed the extension, EPA published several additional changes to the SPCC regulations addressing issues including the secondary containment requirements for operational equipment, "motive power containers" (a newly defined term), and a professional engineer certification requirement exemption for smaller quantity storage facilities.3 The proposed new compliance deadline is July 1, 2009. Comments on the proposal were due by January 25, 2007, so the final word from EPA should be issued soon.

Michael C. Ford is an Attorney with the Phoenix office of Bryan Cave, LLP, practicing environmental and occupational safety law. His practice is focused primarily on regulatory compliance advice and enforcement defense. He can be reached at 602-364-7417, or by email at mcford@bryancave.com.

^{1 71} Fed. Reg. 76204 (December 20, 2006).

^{2 71} Fed. Reg. 77357 (December 26, 2006).

^{3 71} Fed. Reg. 77266 (December 26, 2006).

Associations Pages

AAI



www.azind.org

AAI 's EHS committee continues to hold monthly breakfast meetings on the 2nd Wednesday of each month. January's meeting focused on the 2007 legislative session. Speakers included Jake Flake, Chairman of the Arizona Senate's National Resource and Rural Affairs Committee and Ray Barnes, Chairman of the Arizona House's Environment Committee. February's breakfast meeting will be held on

Jeff Homer, EHS Committee Chairman



February 14th and will feature ADEQ Directory Steve Owens who will talk about the Governor's Climate Change Advisory Group and their report of recommendations for reducing green house gas emissions in Arizona. Breakfast meeting are held at the Sheraton Phoenix Airport hotel at 1600 South 52nd St. in Tempe. Breakfast is served at 7:00 AM.

AAI's EHS Committee continues to host monthly Brown-bag Forums with Maricopa County's Air Quality Department where county officials speak on a variety of air permitting issues in Maricopa County. Brown Bag Forums are held on the third Thursday of each month beginning at 11:30 AM. Contact William Doppler at WDoppler@mail.maricopa.gov to be added to the email notification list.

AAI's EHS Committee continues to monitor air, waste and water Issues affecting manufacturers in Arizona through a series of subcommittees. To participate on these subcommittees or for any other questions contact Jeff Homer at 480-441-6672.

American Society Safety Engineers Southern AZ Chapter

The American Society of Safety Engineers, Southern Arizona Chapter, enjoyed a presentation by Julia Rosen, CIH, at the January 9, 2007 meeting "Industrial Hygiene for the Safety Professional." She explained that the job of an Industrial Hygienist is in many respects similar to a Safety professional's in that both must Anticipate, Recognize, Evaluate and Control hazards.



Shari Di Peso, Secretary

For example, Ms. Rosen illustrated the similarities by showing an employee mowing the grass using a riding lawn mower and asking the Safety professionals about the hazards. In addition to obvious physical hazards including flying particulate, she pointed out many IH hazards - carbon monoxide, noise, heat, cold, vibration and exposure to chemicals such as pesticides and herbicides. Most Safety professionals would anticipate, recognize, evaluate and control all of these hazards as well. Fortunately, the two disciplines, Safety and Industrial Hygiene, have a good working relationship in the area.

EIA-AZ



Website: info@eia-az.org. On behalf of The Arizona Chapter of The Environmental Information Association, I would like to wish everyone a happy, busy and prosperous new year.

In keeping with EIA's purpose of generating and disseminating information, and U.S. EPA's oversight, outreach and education effort in managing asbestos, we have planned 13 free one day asbestos regulatory seminars in



Bill Caveness,

Nevada, Utah, New Mexico and throughout Arizona for the coming year. For those of you who may not be familiar with our seminar effort, we invite you to visit our web site at www.eia-az.org for information and seminar locations for 2007. We also invite you and your clients to attend any of the seminars, with registration on the web site – we'll buy breakfast and lunch, and provide handouts. Presentations are by federal and local regulators, and volunteers from EIA.

We have also planned a series of quarterly dinner meetings with a small fee for attendees, addressing topics of current concern in the environmental and hazardous materials control industry. Again, please check our website for information on dates and locations.

We invite you, as professionals in this environmental industry, to join with us in our endeavors to protect owners from liability, employees from harmful exposures, to aid our regulating community in accomplishing these ends, and to enhance the professionalism of our consultants and contractors. Together we really can, and have, made an impact for the last 15 years.



Bob Estes, President

Greetings! Shortly after the deadline for input to the last issue of the Journal, we scheduled a different speaker for the January 24 lunch meeting, which coincides with the Gatekeeper Seminar, so Lisa Hopper, with World Care will be the speaker at our February 28 lunch meeting. The meeting will be held at The Manning House, located at 450 West Paseo Redondo in downtown Tucson from 11:30 to 1:00. Her topic is "Recycling for Humanity".

Our March lunch meeting will be held on March 28 (speaker pending). On Saturday, March 17 we will have a 20th Anniversary Party for all current and past members, at Reid Park in central Tucson. A BBQ lunch will be catered. We're hoping to reach as many former members as possible, especially past board members, to let them know of our plans.

The annual RCRA Seminar is scheduled for May 17 at the University Marriott – we need volunteers to assist with planning. SAEMS will also be holding a combined buffelgrass and litter cleanup on March 10th, at Freedom Park on 29th Street, east of Swan.



Jeanie Merideth Society Manager

Happy New Year from the AHS. The Corporate Board will be meeting early February to elect its new Officers. Peter Kroopnick has done an outstanding job in leading the Society in 2006. 2007 promises to be another good year.

AHS Chapters Board of Directors - Phoenix Chapter Officers: President: Ted Lehman; Vice President: Mike Hulst; Treasurer: Beth Proffitt; Secretary: Matt Beversdorf. Tucson Chapter Officers -

President: Marla Odom; Vice President: Rob McGill; Treasurer: Mike Mahan; Secretary: Dan Guido. Flagstaff will announce their Chapter Officers soon.

The AHS website has gone through some changes and is now operational. Please visit www.azhydrosoc.org. We now have a Members Only area where members may visit and view and/or download documents not available to the public.

Southwest Hydrology and Arizona Hydrological Society jointly present: 2007 Regional Water Symposium, 20th Annual AHS Symposium Aug. 29-Sept. 1, 2007, Westin La Paloma Resort & Spa 3800 E. Sunrise Dr., Tucson, AZ Please visit the Symposium web site at: http://www.swhydro.arizona.edu/symposium

SAEMS



If you have any questions about SAEMS PI ease VISIT OUR WEBSITE AT WWW.SAEMS.ORG

Arizona Hydrol ogical Society



pl ease visit the AHS web site: http:// www.azhydrosoc.org



Chuck Paulausky,

Greetings from the Thunderbird Chapter!

I hope everyone had a safe holiday season. Here's what's coming up: CHMM Overview Courses-If you are interested in becoming a CHMM, or just want to broaden your environmental knowledge, the Thunderbird Chapter is offering the CHMM Overview Course twice this year: February 26 -March 1 in Tucson, as part of the Waste Management

Symposium. April 16 - 20 in Phoenix. For details: www.thunderbirdchmm.org.

Mark your calendars for the 3rd Annual Gatekeeper Regulatory Roundup on Feb 20-21, 2007! The Thunderbird Chapter will once again team with EPAZ and AZSERC to offer a bigger and better event.

The ACHMM/EPAZ monthly lunch meetings are now being held at the ASU MERCADO, 502 E. Monroe Street (7th St, south of Van Buren) from 11:30 ~ 1:00 on the second Thursdays of each month. Meeting details: www.thunderbirdchmm.org or www.epaz.org.

ACHMM Thunderbird



Cal endar Items:

Feb 20-21 - Gatekeeper RR Feb 26-Mar 1 - ACHMM Nat'l Overview Course-Tucson Mar 1 - T-Bird Happy Hour Mar 8 - Luncheon Meeting Apr 5 - T-Bird Happy Hour, TBA Apr 12 - Luncheon Meeting, . AZPDES & Arsenic Rul e Update Apr 16-20 - ACHMM Nat'l Overview Course-Phx.

Valley Forward to Convene Val I ey Forward **Livability Summit on Climate Change**



Diane Brossart, President

Over 300 business and civic leaders are expected to attend Valley Forward's Livability Summit at the Phoenix Convention Center on April 27. The fourth

annual half-day conference will focus on climate change - causes, effects and solutions. It will spotlight ways business and industry can help reduce greenhouse gases,

and facilitate meaningful public dialogue on challenges to building a sustainable future.

The program will be held from 8 a.m. – 1:30 p.m. and will feature nationally renowned scientists, educators and private sector experts on renewable energy and sustainable development.

For more information, call (602) 240-2408 or visit www.valleyforward.org.



Arizona Environmental Strategic Al I iance



WWW.AZALLIANCE.ORG

arizona resource exchange: 602-325-4705

Alliance members are off to a busy start for 2007! We recently expanded the Arizona Resource Exchange project to help 'match' Arizona businesses and organizations with materials or items available for reuse or recycling with potential users. We have a new Project Administator, Sue Diaz, and a new phone number for the program: 602-325-4705. This resource is entirely free (thanks to a SEP Grant from EPSI.)



Rob Barnett, Chairman

Please feel free to call Sue if you have usable/recyclable materials or if you need materials. Sue has had a few great successes already, for example, Sue found end-users for about 1,440 lbs of high-quality self-adhesive labels (an estimated 300,000 labels) that otherwise would have ended up in a landfill. One of the end users was a computer repair business that will use the labels to identify computers and hardware, other users included schools needing name tags.

On April 3rd, the Alliance, along with ADEQ and US EPA Region 9 is sponsoring a FREE luncheon seminar on the benefits of Performance Track and EMS. Both US EPA Reg. 9 Administrator Wayne Nastri and ADEQ Director Stephen A. Owens will speak and be available to answer questions on the programs. If you company is leading the way towards environmental excellence, then you are ready for Performance Track! For more info. please see our ad on page 3.

Potential new Alliance members are welcome to attend our monthy meetings to learn more about the Alliance and membership. Please contact us at 480-422-7392.

AZ Chapter Semiconductor Environmental Safety & heal th **Association**

For Info about a **SESHA Membership** pl ease visit us at: www.seshaonline.org Happy New Year. Another year has past and I would like to thank everyone for their participation in 2006 SESHA chapter activities. The SESHA chapter had a highly successful year with quarterly chapter meetings and a mini-conference. SESHA was able to provide good quality meetings and a conference that were well attended, bringing educational value to its membership.





President

The SESHA AZ steering committee is committed to holding quarterly meetings with local presenters discussing emerging topics in the semiconductor industry. The 2007 first quarter meeting has been planned and scheduled. This year's activities will also include a miniconference held locally and a national Symposium in April held in Santa Clara.

Membership in SESHA provides the following benefits to you:

- Network with your industry peers, leaders, and suppliers at local chapter and our national events.
- Posting and access to semiconductor industry career opportunities.
- Obtain discounts for professional development opportunities at regional mini-conferences and the annual international symposium.
- Receive full access to an expanded SESHA web portal (www.seshaonline.org) including "members only" features such as: access to search & download past symposium and mini-conference proceedings, access to the SESHA online membership directory and access to the e-Journal and online library.

EPAZ



EPAZ holds monthly I uncheon meetings on the 2nd Thursday of the month from 11:30 am to 1:00 pm. Cost is \$20 members/ \$30 non-members.

EPAZ gathers on the Last Wed. of the Month for a Causal Cocktail Mixer

Our Jan. meeting featured EPAZ's own Secretary Laura Malone with Goodrich Aerospace and the Thunderbird Chapter ACHMM's Chuck Paulausky with CP Safety & Environmental. They both raised awareness of practical considerations for safety committees and shared their onhand experiences. The meeting was very interactive and the audience provided some great examples from their experiences too. This was a great meeting to kick off the New Year.



Eddie Martinez

We will not be hosting a meeting in Feb. due to our 3rd Annual Gatekeeper Regulatory Roundup conference being held on Feb. 20-21, 2007. This 2-Day conference is a must for all Env., Health and Safety Professionals. The conference will be held at Chaparral Suites Resort, 5001 N. Scottsdale Road, Scottsdale, AZ. You can visit our web-site for more information.

EPAZ has begun to meet at a NEW location. Monthly luncheon meetings are now held at the ASU Mercado downtown at 502 E. Monroe (across from the Arizona Center). Parking is available at the garage directly South of the Mercado. Parking validation is provided to all attendees.

Visit our web site at http://www.epaz.org for more details regarding upcoming meetings and our monthly mixer location or contact Eddie Martinez at (602) 708-9179.



Sustainabil ity and Sustainabl e Devel opment

Nicholas R. Hild, PhD.

This Isn't Lake Wobegon, Toto . . .

There are many things I enjoy about living in the desert: the peace and tranquility that accompany my morning coffee while looking out over the Superstition Mountains and, on Sunday, listening to Garrison Keillor on Prairie Home Companion are a couple that come to mind. While it's true that you can hear his two hour radio show from American Public Media on NPR on Saturday, I find that the peacefulness of the desert and the magnificent mountains somehow make his show on Sunday mornings extra special, especially when he does his dialog about Lake Wobegon.

For those of you who've not had the pleasure of listening to the show, one of the regular features on the Minnesota-based PHC variety show is updating the news from Lake Wobegon, a place that Keillor colorfully describes as "the little town that time forgot and the decades can not improve..." and where "all the women are strong, the men are good looking, and the children are all above average." In other words, it's just the sort of place that most of us have fantasized about living.

Lake Wobegon is a place that's mostly untouched by the harsh realities of the world, where upper middle class families with Father-Knows-Best lives are seemingly insulated from the normal tragedies that real-world communities endure—yet its always a place PHC devotees look forward to hearing about, every week probably because we unconsciously think that if everything is still OK in Lake Wobegon, then the realities of the coming week won't be so hard to face.

What got me thinking about Lake Wobegon was an article in the newspaper recently about the upcoming downtown Phoenix road race that organizers are now advertising as being a "green" event— a race that will couple racing activities to "green" products vendors in a sort of "eco-earth-friendly-fair" environment.

Talk on the street is that Phoenix city council members and downtown business interests remember the loss of revenues that accompanied the race the last time they tried them through downtown so this time, promoters are spinning the hype that they will have "green" businesses committed to displaying their products in downtown as a backdrop before and during the race "events."

The organizers obviously think this must be a metropolis full of folks recently relocated here from Lake Wobegon—they evidently think that the citizens of our fair community will somehow be convinced that the race will be a sustainability event just because, instead of 110 octane gasoline, the fuel of choice will be methanol—that will bring together (in their words) the "tree huggers to join hands with the tragically hip..." which will see 150,000 green-seeking (?) race fans flock to the "largest green festival in the country..." to see eco-conscious exhibits featuring solar cars (on display; not running the race), environment-friendly vendors (whatever that means), and organic food vendors who will change the eating habits of race fans from red meat and beer to tofu and yogurt shakes, just because it's the "tragically hip" thing to do (their words; not mine).

Its clear that they need a PR person to teach these guys the art of being **Politically Correct** before they insult everyone they are trying to bring into the low octane mix!

As both a "car person" and sustainability advocate, I am the last to criticize trying to "brand" sustainability to make it more mainstream but, somehow, the effort to bring in the "treehuggers" (their word; not mine) to create a sustainable "impression" about race cars that measure mileage in gallons per mile rather than mpg's (even if it IS methanol), reeks of a disingenuous attempt to camouflage the real reason for gathering such disparate groups together—to sell tickets and make money!

Race organizers claim they are buying carbon credits for the emissions saved by running methanol instead of gasoline (can they even do that???) and putting the *profits* (profits—what *profits*?) toward "earth-friendly technologies" (whatever those might be). My take is, they are using all the right-sounding words to convince the Phoenix business community and all those snowbirds who've fled the Chatterbox Cafe in Lake Wobegon for winter sun in the valley, that somehow, this will benefit our children's, children's, children.

Nicholas R. Hild, PhD., Professor, Environmental Technology Management, Arizona State University College of Technology and Applied Sciences, has extensive experience in Environmental Management in the southwestern U.S. Dr. Hild can be reached at 480-727-1309 and by email at DrNick@asu.edu.

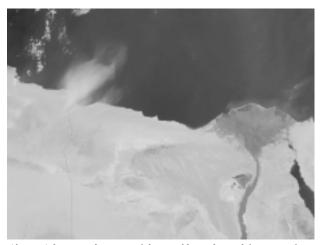


Larry Olson, PhD.

It's All About Chemistry

Response to Desertification

s we discussed in the last issue, deserts are among the most fragile ecosystems on the planet and human intervention can have a profound effect on them. Because of limited water, deserts have low biological productivity, leaving soils exposed and subject to compaction and erosion from wind or water. Human causes for desertification include over-grazing, deforestation, improper irrigation techniques, use of agro-chemicals, unsustainable cultivation practices, bush fires, and pressures from overpopulation and poverty that result in poor land use decisions. In this article I want to review some



Above: A large, swirling mass of dust, visible on the top left portion of the image, is blowing from the Sahara into the Mediterranean Sea. Photo Courtesy of Visible Earth at visibleearth.nasa.gov

examples of how different countries are trying to combat desertification.

National Action Programs (NAPs) through the UN Convention to Combat Desertification (UNCCD) are available at http://www.unccd.int/actionprogrammes/menu.php. China's NAP, for example, identifies 60% of its population as living in affected areas that cover 3.3 million km² or 1/3 of its land mass. Desertification threatens 13 million hectares (ha) of arable land and almost 5 million ha of pastureland, a serious problem in a country which feeds 22% of the world's population on 7% of the world's tillable land. The Gobi desert has expanded by 52,000 km² (half the size of Pennsylvania) in the last 50 years and is now 150 miles from Beijing (http://www.earth-policy.org/ Updates/Update26.htm). Even non-desert areas have been affected by the tremendous sand storms originating in northern and western China and silting of rivers. The Chinese response to desertification has encompassed creating shelter belts of grass, shrubs and trees to protect farmlands, fixation techniques for sand dunes, aerial seeding, and integrated erosion management plans for watersheds and hilly areas. One of the most ambitious projects is to prevent desert encroachment by planting a greenbelt around the 3000 km circumference of the Taklimakan Desert in the Xinjiang Autonomous Region of northwest China. The project will take 10 years to complete.

Estimates are that 46% of the land in Africa is affected by desertification. In addition to the bio-physical factors that contribute to land degradation, Africa has to deal with an ill-defined land tenure system and the vestiges of colonialism that are very different from the legal structure found in the U.S. or Europe. Ghana's NAP cites poverty as a primary cause of desertification and focuses on how to enhance food production and improve rural economic conditions without creating more pressure on the land. Diversified land use systems such as regeneration forestry, mixed farming (crops plus livestock), and vegetable production as well as small scale irrigation are being promoted as ways to cope with drought and improve income. Use of LPG and more energy efficient stoves that use less wood and charcoal will help reduce pressure on forests. Infrastructure such as better roads and warehousing can improve marketing of agricultural products that will increase income. Non-farming enterprises such as bee keeping, weaving, soap making, and fruit processing can also provide alternatives to farming or grazing on marginal lands.

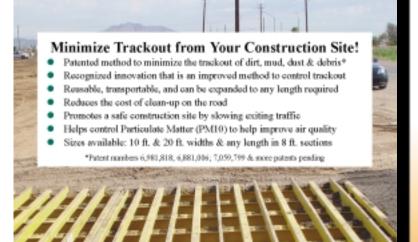
As you can see, to truly address the problems of desertification in a country like Ghana, a comprehensive strategy that addresses education, poverty, infrastructure, and legal rights as well as the science behind land degradation is necessary. It's a complicated business and requires a deft touch on the part of the country's leaders. Hopefully, we are preparing such leaders in ASU's Environmental Technology Management program as we currently have students from almost a dozen countries and continue to reach out to students from around the world.

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 env. mgmt. He can be reached at 480-727-1499, or by email at Larry.Olson@asu.edu

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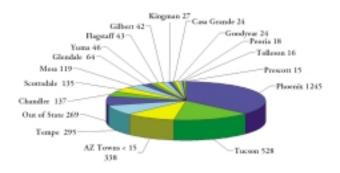


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Journal Distribution, by City

Based on the Dec/Jan 2007 issue of the Journal with a mail list of approximately 3385. Journal readers include EH&S professionals at Arizona facilities that store, handle, treat, or transport hazardous materials and hazardous waste, professionals managing air, water, waste, and other environmental fields, and those professionals at the service companies, suppliers, and other organizations that support this sector, and educators, attorneys, and governmental regulators.

NOTES

- * "Out-of-State" includes many professionals who are responsible for Arizona facilites but are located out of Arizona.
- ** "AZ Towns < 15" is a total of readers in towns receiving fewer than 15 subscriptions each.
 *** An informal survey of some of our readers suggests at least 2 readers per issue distributed; this indicates a possible total Journal readership of approximately 6770 per issue.

Environmental Compliance, Awareness, & Responsibility

by Hon. Kenneth F. Reilly, J.D.

s security a big concern at your workplace? It should be and both EPA and DOT expect that all members of the regulated f L community remain informed and vigilant with respect to the various threats that will most certainly be presented to many American communities in the next few years. Terrorism can come in many forms; biological, radiological and chemical being just a few. Various generators of hazardous waste throughout the country are responsible for the production of many wastes which would be ideal targets for a terrorist hijacker. In fact, the FBI has previously indicated that second only to an airplane, the most desirable target for a terrorist is a placarded vehicle. In the late summer of 2006 the U.S. Federal Terrorist Screening Center indicated that over 6,000 known or suspected terrorists had been identified as living within America's borders. Many had been stopped for traffic violations and provided identifications (driver's licenses) which, only long after the citation had been issued, were determined to be bogus. As a matter of fact among the 9/11 hijackers there were 364 separate pieces of identification reported.

Only recently has the FBI begun a serious campaign to investigate the backgrounds of individuals applying for training for commercial motor vehicle licenses and the associated permit to transport hazardous materials. Meanwhile, it can reasonably be presumed that there are an unknown number of existing licensees (persons who have already completed such training) plying American highways. It is not unreasonable to believe that among them are at least a few with the intent to harm America if given the chance. In a recent article, Syndicated Columnist Michelle Malkin wrote "Last week, law enforcement officials arrested an illegal alien enrolled at a Smithfield, R.I., tractor trailer training school who was trying to obtain a commercial driver's license and permit to haul hazardous materials. Not many people paid attention. You should. Illegal alien Mohammed Yusef Mullawala, 28, of Jamaica, N.Y., had obtained driver's licenses from New York, New Jersey and Rhode Island. He was reportedly in a hurry to get a commercial driver's license and a permit to haul hazardous cargo. He showed no interest in learning the fine art of driving a tractor-trailer. He had no interest in learning how to back up. Sort of like learning how to steer a plane, but not take off or land."

There are dozens of other stories like these coming across the news wires regularly. As the environmental Coordinator/Manager at your facility, security should always remain one of your highest priorities.

Hon. Kenneth F. Reilly, J.D., is an environmental lawyer with over 45 years of experience, including service as a Texas Judge. He has also consulted to the U.S. Dep't of Energy and the Texas House of Representatives. He can be reached at 800-542-2826, or by email at Reillytalk@Reillytalk.com.



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HOLMES: Prospecting for Environmental Business

Begins on Pg 26

messages are being delivered by corporate America as marketing tools, not by a left-leaning political group bent on saving whales. I saw a TV ad with an oil-soaked penguin being cleaned after a spill. Not an ad for Green Peace, but for Dawn dishwashing soap! The Formula One race planned in Phoenix is promoting a green event. There is probably a Hybrid car in your parking lot, what about the "Green Building" movement. Why? Because it is good business to be "green", and the shift in public opinion is making it so.

We are ripe for another Love Canal. Not necessarily another environmental tragedy, but another "Tipping Point" that will, again, translate swelling public opinion into demand for environmental products and services making it a great business to be in again. It *could* be in the form of an environmental tragedy, let's hope not. It might be in the form of a technological innovation, maybe. More likely, it will be a political move setting forth a chain of events that cause the "Point to Tip". The event itself is secondary, the public opinion at the time which dictates the response is primary. Public opinion has been building in our favor for some time, and should continue to do so. The only question is what catalyst will break it open again!

Thank you for reading and please keep the suggestions coming!

Joe Holmes is National Director of Sales & Marketing with Environmental Data Management. Joe can be reached by email at Joe. Holmes@edm-usa.com





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Is It Prudent?

Continuted from pg 8

to a law enforcement organization tends to eliminate the access to, consideration of and application of a vast number of other disciplines which are just as vital if not critical. The emergency management umbrella of disaster resource coordination includes all disciplines which can be of need and use before, during and after a disaster occurs. The purpose of emergency management, according the statutory mandate identified by the Robert T. Stafford Act, is to protect lives, reduce pain and injury, and prevent damage to property, in that order.

The political entities should constantly encourage and support this lofty goal without making it a political football, bouncing from one election issue to another, depending upon who is running for office. FEMA can perform effectively with the right support, funding, and trained, experienced professional staff as long as its director can operate independently and report directly to the president who, hopefully, will be knowledgeable, experienced and informed enough to make the necessary effective decisions as to when and how to approve the activation of the appropriate resources.

In all of these discussions of emergency management, homeland security, disaster management, or whatever label is chosen to apply, it must be remembered that the state and local governments are the basic foundation of the emergency

management services (with over 15,000 identified emergency management titled state and local officials nationally) which are needed in a disaster. There is no margin of error in which politics should be allowed to interfere. If political interference is allowed to come in and disrupt or delay the emergency organizational response, the result will be a repeat of the Hurricane Katrina fiasco. That will be translated into a tremendous loss of life, increased pain and suffering, coupled with the dramatic damage to property and governmental infrastructure. This result may not be 100 percent avoidable, but the impact could be significantly reduced with the proper application of the emergency management functions through the use and application of qualified, experienced, well-trained emergency management personnel who are given the support of their political leadership. Let's get over the fear of what might violate acceptable political correctness and implement what is needed to save lives on a daily basis.

Bob Berry, CEM, is a Certified Emergency Manager, Associate Professor of Emergency Management in the Department of Applied Criminology at Western Carolina University, with over 18 years of experience as an emergency management professional with the Nevada State Division of Emergency Management. Bob can be reached by email at berry@email.wcu.edu.



Tres Rios Nature & Earth Festival

he Tres Rios Nature & Earth Festival, now in its fourth year, will be hosted at its new location next to the Phoenix International Raceway, on the river in the B&M Wildlife Area, in Avondale, Arizona.

Located near the confluence of the Gila. Salt and Agua Fria rivers, the Tres Rios (three rivers) Nature and Earth Festival is held in cooperation with the Arizona Game and Fish Department, Luke Air Force Base's award winning environmental education programs and activities, the local communities and partners. The event celebrates the rivers, wildlife, outdoors, history and heritage of the area and Arizona, while educating adults and children on the environmental stewardship, or "Living to the Xtreme"! The best part: admission is FREE and there are a ton of giveaways!

Festival hours are 10 a.m. to 6 p.m. on Saturday, March 17 and 10 a.m. to 4 p.m. on Sunday, March 18. Visitors to the festival will be able to:

- Learn to "Live to the Xtreme" Green Living
- Listen and talk to experts about wildlife, the great Phoenix outdoors.
- Participate in a beginner's bird walk or a more advanced wildlife-watching tour early in the mornings on both days.
- Walk to nearby wildlife-viewing areas.
- Explore the booths of wildlife and conservation organizations.
- Browse and shop at our farmers' market.
- Discover how Luke Air Force Base and other local companies are making a difference as leaders in Environmental Stewardship and Sustainability.
- Experience the 5th annual "Recycling Fashion Show"
- Listen to local entertainers and sample a diverse food menu.
- Participate in a fishing clinic for kids.
- Ride on a canoe on at the lake created at the confluence of the Salt and Gila rivers.



 Allow your children to experience an extensive children's play area with hands-on crafts, live wildlife displays and activities, storytelling, temporary tattoos, and more.

The event at Base and Meridian Wildlife Area is located adjacent to the Phoenix International Raceway in Avondale, five miles south of I-10 on Avondale Boulevard (7602 S. Avondale Blvd., Avondale, AZ 85323).

Journal readers

If you are interested in participating in the event as an exhibitor, becoming a sponsor or would like to

help us advertise the event within your local company or to the community, we would love to gain new partners! Please contact Jeffery Schone at 623-856-4166 or e-mail to jeffery.schone@luke.af.mil.

Contact Information

For more festival information, visit www.tresriosnaturefestival.com on the Internet or call (623)204-2130.

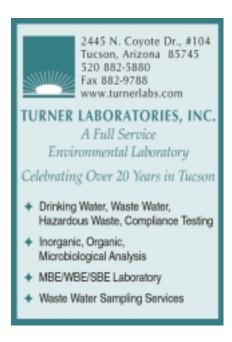
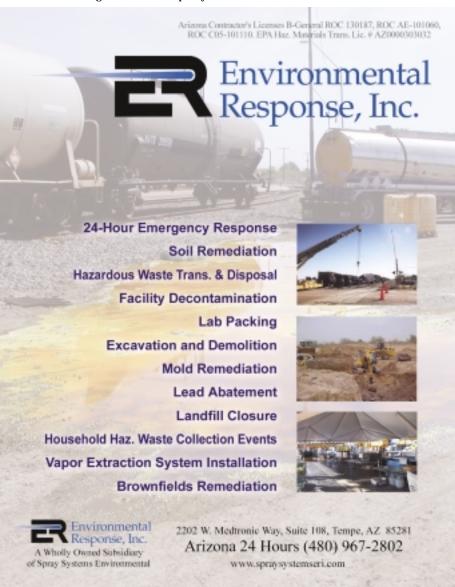




Photo Above: Young models from a past year's Tres Rios Festival Fashion Show







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When EPA and OSHA regulations were in their infancy, business was good, really good. New companies were formed, innovation was rampant, and growth rates were double and triple digit. The industry has matured in textbook fashion and we've all adapted to make our way. Some years have been better that others, but the overall trend has seen margins erode, tougher competition, corporate acquisitions to maintain meager market share, personnel reductions, and companies focused on more promising markets. Not to mention the companies out of business all together. But, could there be a turn ahead that puts us all in the right place at the right time?

Most would agree that Love Canal is the "Tipping Point" that started it all; a single event triggering a passionate movement establishing the framework for our industry. What is interesting to me are the similarities between the groundswell of environmental awareness and public opinion prior to Love Canal and what is happening today. I'll explain.

Do you remember Suzy Spotless? How about Iron-Eyes Cody? Suzy Spotless was the little girl that pestered her Dad to pick up the trash he dropped and "Keep America Beautiful" and the image of the crying Indian standing next to the freeway, that's ole' Iron-Eyes. These were public service ads designed to raise awareness and were broadcast in 1969 and 1971. The first official Earth Day was in 1971, and its origins go back to 1962. These illustrate the growing public opinion prior to Love Canal. By the way, Love Canal hit in earnest in 1978. Would Love Canal have had the political impact it did if it would have occurred in 1955? I doubt it. Fast forward to today.

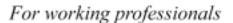
Look around, listen to the radio, watch television, read. The shear number of references about alternative fuels,



"green" products, sustainability, global warming, air quality, water conservation, and saving electricity are staggering. Try it.... Make a mental note every time you hear a media snippet that is "green"; you'll be amazed. More importantly, the

Continued back on pg 22

Joe C. Holmes





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