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From the Editor



This issue of the Journal completes five years of publication, marking a major milestone in our commitment to serve the Arizona EH&S community. I would like to thank you -- readers, authors, columnists, contributors, and advertisers -- for your continued support and participation that has made this possible. Unlike a newspaper or a typical magazine,

the Journal does not have a paid staff of writers, and instead relies on contributions of articles and columns from experts in the Arizona environmental community. This expertise, along with community information and information on products and services from our advertisers, makes the Journal a valuable resource.

During these five years, a large amount of information has been published in the Journal. To make this more accessible to readers, we have compiled an extensive index of articles, columns, and authors covering the entire first five years of publication. Using this index (which begins on page 8) you can readily find any topic or author you are searching for, and then, if you do not have a hard copy of a particular issue, download the issue containing the article as a PDF copy from the Journal website.

While an index is not intended to be "read" word for word, I hope you spend few minutes scanning the pages and noting both the topics, and, especially, the wide range of highly qualified Arizona environmental experts. If *your* name is not listed, please consider authoring an article for one of the upcoming issues! Thank you!

Sincerely,

Jim Thrush, MS Environmental Management
Publisher & Editor

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EDITORIAL: Publisher & Editor: James Thrush, M.S. Env. Management
jimthrush@cox.net or call 480-422-4430 x42

COLUMNISTS: Regulatory Developments: Michael C. Ford, *Bryan Cave LLP; Sustainable Development:* Nicholas R. Hild, PhD., *ASU; It's All About Chemistry:* Larry Olson, PhD., *ASU; Prospecting:* Joe C. Holmes, *EDM.*

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Chemical Facility Anti-Terrorism Standard

Jan. 19, 2008 Deadline to submit Top Screen Analysis

by David Lima, MS, CHMM

A SCARY SCENARIO...THE BEGINNING

As Chemical Safety Officer of a large chemical manufacturing facility, your first responsibility each morning is to review incident and security reports from the night before. Good news, the incident report bin is empty. An inventory exception report, however, does catch your eye. A container of

concentrated hydrogen peroxide cannot be accounted for. It is month-end, and chemical inventories are being audited. This has happened many times before and the chemicals always seem to turn up after a little searching. No reason to worry at this point, you think, and you turn your attention to other matters.

After addressing the most urgent issues, you take a moment to catch up on the local news. A news flash catches your eye. An explosion has just occurred alongside a major roadway. Witnesses say that the explosion occurred at a bus stop while a number of people were waiting for a bus. Five people are believed dead, and more injured. A bomb squad expert states that the explosive involved appears to be a mixture of a strong oxidizer and acetone. Witnesses speculate that the incident may have been the failed attempt of a terrorist whose objective was to board the bus and detonate the explosive. The

city bus system has been completely shut down and Department of Homeland Security (DHS) personnel have been dispatched to the scene. You begin to think, to connect the dots. The missing hydrogen peroxide is a strong oxidizer. Could these events be associated? You immediately call the Plant Manager...

CFATS BACKGROUND

In October of 2006, President Bush signed into law the Department of Homeland Security Appropriations Act of 2007. Section 550 of the Act required the Secretary of Homeland Security to establish risk-based performance standards for security of chemical facilities that, in the discretion of the Secretary, present high levels of security risk. On April 9, 2007, DHS issued an interim final rule entitled Chemical Facility Anti-Terrorism Standards (CFATS) at 6 CFR Part 27. CFATS requires covered chemical facilities to prepare a security vulnerability assessment and to implement a site security plan that addresses those vulnerabilities.

APPENDIX A

At the heart of determining whether a facility is a "covered" facility is Appendix A. Appendix A is a list of over 300 chemicals of interest, and the associated Screening Threshold Quantities (STQ's). A facility in possession of a listed chemical in excess of the STQ is required to complete



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and submit a consequence assessment, known as a Top Screen. The Top Screen submittal is then used by DHS to make a determination as to whether a facility presents a high level of security risk. If so, that facility becomes subject to further CFATS requirements.

Appendix A, therefore, is the primary trigger mechanism for CFATS. When CFATS was issued, however, Appendix A was included only as a proposed list. As a practical matter, short of being contacted directly by DHS, the rule had not yet been triggered for the majority of facilities. This is analogous to getting sprinters ready in the starting blocks, and then forgetting about the starting gun!

Since April, tens of thousands of chemical facilities have been coiled in the starting blocks, anxiously waiting for the sound of the starting gun. On November 20, 2007, DHS sounded the CFATS starting gun by publishing the final Appendix A in the Federal Register. In generating the final Appendix A and which chemicals should be regulated, DHS considered the following three primary security issues:

1. **Release:** Quantities of toxic, flammable, or explosive chemicals that have the potential to create significant adverse consequences for human life or health if intentionally released or detonated.
2. **Theft or Diversion:** Chemicals that have the potential, if stolen or diverted, to be used as weapons or easily converted into weapons, in order to create significant adverse consequences for human life or health.
3. **Sabotage or Contamination:** Chemicals that, if mixed with other readily available materials, have the potential to create significant adverse consequences for human health or life.

Notable differences between the proposed and final Appendix A include the removal of acetone and urea, and modification of the thresholds for chlorine, propane, and ammonium nitrate. Acetone and urea were removed because the explosive hazard they present could, in the opinion of DHS, be effectively managed by focusing on the oxidizers themselves (i.e., hydrogen peroxide and nitric acid). For chlorine and ammonium nitrate, unique STQ's were developed based upon the hazard presented, such as theft, release, and explosion.

Regarding propane, the STQ was raised from 7,500 lbs in the proposed rule, to 60,000 lbs in the final Appendix A. Additionally, facilities are not required to count propane in individual tanks of less than 10,000 lbs towards the STQ. By raising the threshold for propane, DHS has elected to shift the focus from non-industrial propane customers to those that possess large quantities, such as industrial facilities, regional suppliers, bulk retail, and storage sites.

TIME FOR ACTION

With the publication of Appendix A, **facilities now have until January 19, 2008 to submit a Top Screen analysis to DHS if they are in possession of a listed chemical in excess of its STQ.** If, based upon the Top Screen submittal, DHS determines that a facility does not present a high level of security risk, then that facility has no further regulatory obligation under CFATS.

Continued on page 14

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This issue of the Journal of Environmental Management Arizona marks the completion of five years in publication. The Journal is honored to have the privilege of serving Arizona's environmental management community, and appreciates the articles, columns, and photographs contributed by over one hundred EH&S professionals in the state.

The expertise of these contributors has resulted in a collection of articles and columns on a wide range of environmental management subjects. This index allows easy access to articles, columns, and authors published during our first five years. Each index entry provides an issue and page number. Instructions for locating the issue, and downloading it from the internet, are found on the page at right.

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Sustainability and Sustainable Development

Nicholas R. Hild, PhD.

Part I of II

"... Everyone is entitled to his own opinion, but not his own facts!"

Sen. Daniel Patrick Moynihan, D-N.Y.

We are beginning to see a lot in the press about the Hollywood set—'stars' like DiCaprio, Penn, Redford, and a few others—and rock and rollers like Coldplay and even Paul McCartney who are touting the many ways we can reduce our own personal carbon footprint. Global climate change has, in fact, become the latest glitz-crowd campaign mantra.

But, what really tripped my trigger was the recent news that former VP Al Gore's *'undocumented'* documentary, *An Inconvenient Truth*, was awarded an Oscar! Of course, the Academy had to invent a whole new category just to recognize the film—something about *Creative Extreme Global Fighting*, maybe?... (the competition in that group was limited, for sure).

Well, OK, we can chalk that up to the campaign mantra. But wait! Now the man behind the film himself has been awarded the Nobel Prize, you say? Isn't that supposed to be an award that has substantial scientific credibility? What's next? The Da Vinci Code?

While the film *was* beautiful in a haunting sort of way, there is a paucity of 'documentation' used to substantiate claims made that the (carbon-clouded) sky is falling. Even the projections that increased warming will melt Greenland's coastal ice and raise the oceans by as much as 20 feet, were thrown out with nary a credible source to back it up. No wonder the glitz-crowd are righteous when they pontificate their mantras—they're operating only on faith in Gore's

prognostications; forget all that scientific stuff!

There is also a complete lack of anything about the positive *benefits* that increased CO₂ levels have had in greening the forest lands in the northern hemisphere, which, in turn, evaporates water faster than at cooler temperatures. Resulting clouds that form from all that evaporation, cool the surface lands which has enhanced agricultural production and benefited every consumer with better produce, foods, and lower prices at the grocery store. Just ask Greenland farmers about that—but, of course, the film wasn't designed to show positives; only scenarios that make good press for the doomsday crowd.

The fact is, global climate change *is* happening. But, the 'jury' (of global climate *scientists*) has yet to come to an agreement on 1) the cause(s); 2) the accuracy of the models used to make predictions; 3) what variables to use in the models; 4) how much of the carbon is human-caused; and/or 5) in the end, what amount of warming can we reduce if we successfully reduce all human-caused carbon emissions (even if we could)?

It has been said before: statistics lie and liars use statistics (or not) to prove their own points. That's another reason why the Hollywood set probably eschews statistics. Or, at least it's a good excuse for *NOT* citing any.

Our esteemed ETM Professor and mathematician Dr. Danny Peterson once noted that 72.2% of all statistics are made up on the spot anyway—or maybe that was 71%—but, who's counting. The point is, you have to dig deeper into the science to know whether (and how) we need to take any given action to reduce greenhouse gas emissions—especially when we are bombarded with so much '*mis*-information' that we tend to just dismiss anything after awhile, and that isn't the right response either. We all need to do our part but we just need to know what that is!

It is not my purpose to be a *nattering nay-bob* of *negativity* (to quote a former VP), when it comes to our need to address global climate change, but the advent of internet "bloggers," radio talk shows hosted by Rush Limbaugh-types, and movie bully pulpit-teers—have allowed so many people to become legends in their own minds that we really need to be reminded that, when it comes to this latest environmental crisis, there are just not many known "facts" that we can count on.

In next issue, I will conclude this discussion with some enlightening pearls of wisdom. But, for now, I will leave you with these few thoughts until then:

...our Children's, Children's, Children —

Nicholas R. Hild, PhD., Professor, Environmental Technology Management, Arizona State University College of Technology and Innovation, 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.

Chemical Facility Anti-Terrorism Standard

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In the event that a facility is determined to present a high level of security risk, it is assigned a risk-based tier level, and the facility becomes subject to full CFATS requirements. This includes conducting a Security Vulnerability Assessment (SVA) and implementation of a Site Security Plan (SSP) that addresses the identified vulnerabilities. The SVA and SSP must be completed and submitted to DHS within 90 and 120 days, respectively, from the date DHS notifies the facility that it is high risk. Provisions have been incorporated into the CFATS rule that enable a facility to appeal the preliminary "high risk" determination issued by DHS. A CFATS compliance flowchart is included in Figure 1.

A SCARY SCENARIO....CONCLUSION

Immediately after you notify the Plant Manager of the missing hydrogen peroxide, the phone rings. It is the receptionist. You are told that there are two DHS agents in the lobby insisting on speaking with you immediately, and that they are armed. You wonder if things could possibly get any worse. As if to answer this question, you notice two police cruisers entering the facility parking lot. The phone rings again, it is the Stores/Receiving Department. Maybe they have located the missing container! Your heart sinks when you are told that the container is confirmed missing.

You call the Plant Manager and notify him of the presence of the officers and ask him to meet you in the lobby. He says that he will contact legal counsel and be right there. As you mentally prepare for the officers, you wonder about the people killed and injured in the explosion. Was it our material involved? Will the company be liable? As you step away from your desk you notice the current edition of the Journal of Environmental Management Arizona in the incoming mail. On the cover is an article entitled "Chemical Facility Anti-Terrorism Standard." You make a mental note to read this article as you head towards the lobby.

David Lima, President of Lima Environmental Consulting, LLC, holds an MS in Environmental Technology Management, and is a Certified Hazardous Materials Manager. Dave has over 19 years experience in the Environmental, Health, and Safety field. Dave can be reached at 480-290-1854 or by email at dave.lima@cox.net.

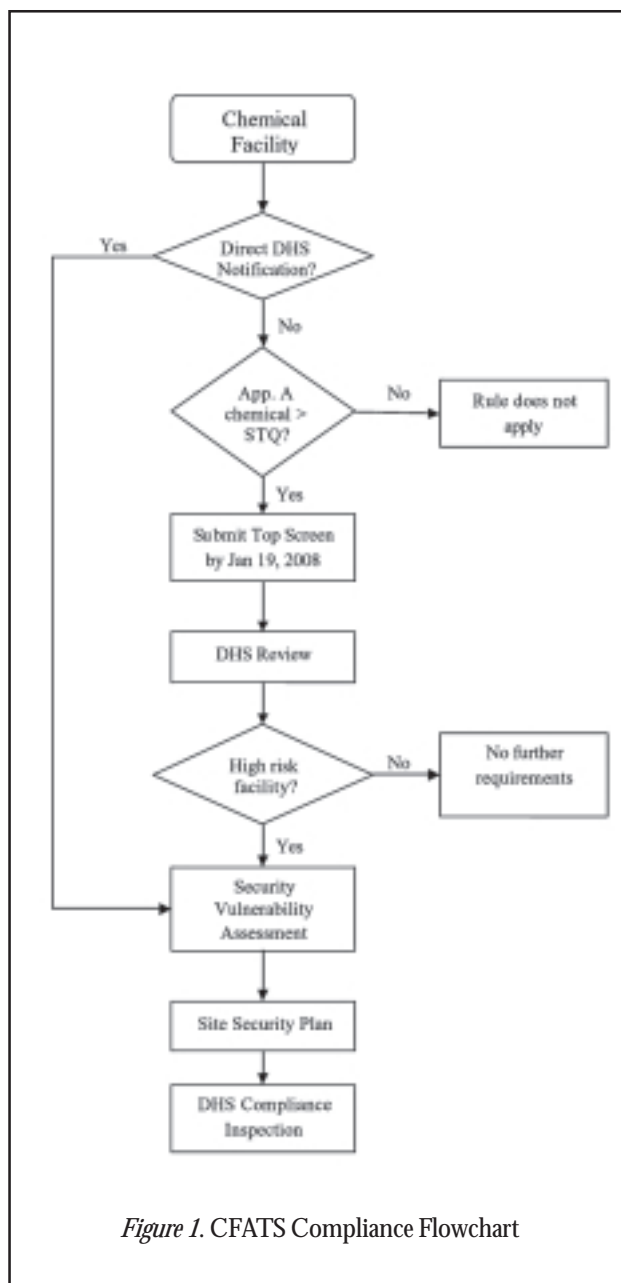


Figure 1. CFATS Compliance Flowchart



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Larry Olson, PhD.

It's All About Chemistry

Climate Change Choices

The 2007 Nobel Peace Prize was awarded to Al Gore and the IPCC (Intergovernmental Panel on Climate Change) of the United Nations. Gore's movie, *An Inconvenient Truth*, has been criticized for exaggeration and fear mongering, but the Fourth Assessment Report of the IPCC represents a consensus of most (but not all) of the world's climatologists, atmospheric scientists, and other experts related to climate change. Reports from each of the three Working Groups were issued in 2007: Working Group I dealt with the Physical Science Basis of Climate Change; Working Group II dealt with Impacts, Adaptation and Vulnerability; Working Group III dealt with Mitigation of Climate Change. The final phase of the Fourth Assessment Report was the Synthesis Report, released on November 17, 2007, which tries to integrate the assessment of the three Working Groups (see http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf). If you want a brief overview of the latest work of the IPCC, this is it.

First a summary of what we know according to the IPCC. The Synthesis Report states that warming of the climate system is unequivocal and that it is *very likely* that most of observed increase since mid 1900s is due to increases in anthropogenic greenhouse gases. Few are now arguing that there has not been some observable temperature increase in the last century. But there are still arguments about the significance of the increase and its cause. According to the IPCC, only when climate models include anthropogenic forcing and not just natural events, such as changes in solar activity or volcanic activity, are the observed changes over the last 100 years accurately predicted. Over the last 50 years, changes in solar and volcanic forcings would likely have produced global cooling instead

of the observed warming trend.

Warming is not uniform. It is more prevalent over land and higher northern latitudes and least over the Southern Oceans and parts of the North Atlantic. Average surface temperatures increased by about 0.6 °C in the 20th century, but it is *very likely* that increases in the 21st century will be larger; a variety of projections show about 0.2 °C per decade. There are no realistic scenarios in which greenhouse gas concentrations remain stable at 2000 levels. Most show CO₂ levels continuing to increase to at least 500 ppm where atmospheric concentrations of CO₂ and CH₄ would far exceed natural variations over the last 650,000 years. The most optimistic projections are for an increase of 1.8 °C in the next 100 years.

What is the effect of an increase in global surface temperatures? IPCC reports there is *high confidence* that many semi-arid areas such as the Mediterranean basin, western United States, southern Africa, and northeastern Brazil will have a decrease in water resources due to climate change. Partial loss of ice sheets and warming of the ocean waters are projected to result in a rise in sea level. Since 1993, sea levels have been rising by 3.1 mm/yr, an increase over the average of 1.8 mm/yr since 1961. Some models suggest a virtual elimination of the Greenland ice sheet that would result in a rise of 7 meters in sea level, but this is on a millennia time scale. This would be similar to the last interglacial period of 125,000 years ago. Changes in wind, precipitation, and temperature patterns on a global scale are predicted.

So what is the big deal? Some parts of the earth may be less habitable, while others become more so with climate change. The earth's climate has changed much more dramatically in the past than what is now being forecast. It has been much colder and somewhat warmer than the present. Coastlines and even interior land masses have been radically reshaped by the ebb and flow of ice. Species have become extinct and new ones have arisen because of climate change. Even man has adapted to climate change with massive human migrations to new continents.

But our flexibility is much less now that most humans are no longer a nomadic people. Massive infrastructure and fixed urban populations mean we can't just pick up and move to more hospitable climates if sea levels rise in Mumbai or Miami or prolonged drought strikes Phoenix or Las Vegas. How much can we afford to spend trying to fight climate change? It's a legitimate question, but then we're going to need to find alternatives to fossil based fuels in the next few decades anyway. Economic benefits to those who provide innovative new technologies and from improved health due to reduced air pollution should be part of any calculation on cost. Energy efficiency helps to reduce both greenhouse gases and the drain on our pocketbook as oil passes \$100 per barrel. Maybe it's time to get serious.

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

Associations Pages

The Journal of Environmental Management Arizona invites environmental, health and/or safety organizations in Arizona to contribute news articles about their associations. If you would like to see your association represented on the pages, please contact the editor at 480-422-4430 x42.



EPAZ

www.EPAZ.org

Wayne Natri, US EPA Region IX Administrator, headlines the 4th annual Gatekeeper Regulatory Round-up conference. The theme of "Super Sustainability" is in recognition of this year's conference occurring just prior to the NFL championship game. This 2-day conference will again cover topics about all environmental media, safety, and hazardous material management and planning with presenters from industry, academic and government organizations. EPAZ Scholarship awards totaling over \$7000 funded by proceeds from these conferences and other EPAZ events will also be made at the conference. *See ad page 3 for details.*

During our Oct. meeting, Barton Day, Bryan Cave LLC, gave us an introduction to new regulations on solid waste management being developed by ADEQ which could have a significant impact on material recycling activities, bringing them under the jurisdiction of the Waste Programs Division of ADEQ. Draft regulations are expected out for public comment in the near future.

In our Nov. luncheon meeting, officer Monty Woods of the Phoenix Police Dept. discussed the rising occurrence of violence in the workplace and what can be done to prevent and prepare for such a situation.

EPAZ holds monthly luncheon meetings the 2nd Thur. of the month from 11:30 am to 1:00 pm., and gathers on the last Wed. of the month for a cocktail mixer. Visit our web site for more details or contact Mannie Carpenter at 602-393-4800.

*Mannie Carpenter,
President*



**SESHA AZ Chapter
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& Health Association**
www.seshaonline.org

The local chapter of SESH A held its quarterly meeting at the ASU Macrotechnology Works Center on September 27, 2007 from 2 to 5 pm. The meeting was called to order at 2 pm by Martin Fekete and all in attendance were welcomed and asked to introduce themselves. The presenters for the meeting were Warren Sanders from HP2, who provided an informative presentation on the management of toxic gas monitoring systems. Following Warren was noted valley environmental icon Dr. Nicholas Hild, who presented on environmental sustainability for industry. The third and final presenter was Richard Eaton from the Arizona Emergency Response Commission, who covered "Tier Two" reporting using the department's web tools.

Refreshments and food were provided by Phase One Environmental Consultants, with door prize and speaker gift cards provided by Medtronics. SESH A is currently planning a one-day high technology mini conference in the first quarter of 2008, the conference will be open to all professional organizations and SESH A non-members.

*Marty Fekete,
President*



www.azalliance.org

The Alliance held our Annual Meeting on November 28, 2007. Our host was ADEQ, and the meeting featured election of officers for the upcoming year, and member Annual Report Presentations from the City of Scottsdale, Intel, and SRP. The presentations provide member companies an opportunity to share highlights of their environmental programs and to publicize environmental leadership activities. The meeting included a lively discussion of the direction of the Alliance, and plans for new activities.

The Alliance is in the process of adding up to two new Program Administrators to the ReUseAZ program. These new PA's will focus on providing reuse and recycling assistance to businesses in the southern and the northern regions of Arizona. Visit ReUseAZ at www.reuseaz.org. Contact the Alliance at 480-422-7392.



*Rob Barnett,
Chairperson*



www.SAEMS.org

I've been watching the BBC/Discovery Channel series Planet Earth. What a beautiful and amazing world we share! After seeing so many different species and ecosystems, it's distressing and disheartening to read the headlines or listen to the news about the state of the planet. Yet, there are people and groups changing things. When I see the efforts of the SAEMS membership and read about the efforts of other professional societies and companies in the Journal I don't feel so discouraged. Things can and are changing for the better. So, the year end message is "Thanks for all your efforts. Keep up the good work. We are making a difference." On behalf of the SAEMS Executive Board and general membership - Have a safe and happy holiday season. We'll see you next year.



*Jeff Christensen,
President*

**ASSE
American Society of
Safety Engineers**

The American Association of Safety Engineers, Southern Arizona Chapter, is pleased to announce that Brandy Kadous, Central Safety Services, Tucson, and Member-at-Large of our chapter, was appointed to the Arizona Department of Occupational Safety and Health (ADOSH) Advisory Board. Kadous was appointed by the Commissioners of the Industrial Commission of Arizona to sit on the Advisory Board. The Board makes recommendations to the Commissioners regarding occupational safety and health issues.



*Shari Di Peso,
Secretary*



www.azhydrosoc.org

This past month has been busy for AHS as we just finished up working on the ISMAR6 event, which was held October 28-November 2nd in Phoenix.

We don't have all the

numbers in yet but we anticipate great things.

The Flagstaff Chapter held a Fall Field Trip to the Inner Basin. Randy Pellatz, the Utilities Director for the City of Flagstaff, was the trip leader. All who joined the trip had the opportunity to witness the aspens golden color change and learn about Flagstaff's water resources.

The Tucson and Phoenix Chapters continue to hold monthly meetings on the 2nd Tuesday of each month. You may visit www.azhydrosoc.org and check the calendar for exact locations and speaker/topic information.

AHS continues to grow in numbers and looks forward to more exciting and educational events in the coming year.

Happy Holidays to all and best wishes for a fantastic 2008.

*Jeanie Merideth,
Society Manager*



**ACHMM
Thunderbird**

www.thunderbirdchmm.org

The **2008 Gatekeeper Regulatory Roundup** is coming up on January 28-29, 2008. This is one of the premier events for Arizona EHS professionals, so you will want to be sure to mark your calendars!

The Thunderbird Chapter will be offering a course in early May 2008 on the "**Essentials of Hazardous Materials Management**," a great course for all EHS professionals, as well as good preparation for CHMM candidates. Watch for ads in the Journal!

Don't forget the **Thunderbird Happy Hour** on 1st Thursdays, 5:30 PM - ?? The ACHMM/EPAZ monthly lunch meetings are held at the ASU MERCADO, 502 E. Monroe Street (SE of 7th St & Van Buren) from 11:30 ~ 1:00 on the second Thursdays of each month. See meeting details at: www.thunderbirdchmm.org or www.epaz.org.

Calendar Items:

- Dec 13 - Luncheon Meeting, Program: Travis Behrens, MCAQD-Asbestos/NESHAP Program- Requirements and Issues
- No January meeting due to Gatekeeper Regulatory Roundup
- Jan 28-29 - Gatekeeper Regulatory Roundup, Chaparral Suites, Scottsdale
- Feb 7 - T-Bird Happy Hour, TBA
- Feb 14 - Luncheon Meeting, Brownfields Redevelopment of Tempe Marketplace, Neil Calfee, City of Tempe
- Mar 6 - T-Bird Happy Hour, TBA
- Mar 13 - Luncheon Meeting, Public Records

*Chuck Paulausky,
Board Member*



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www.eia-az.org

The Arizona Chapter of the Environmental Information Association conducted the annual "seminar scheduling" meeting this past week. The seminar schedule has been lessened to eight locations for 2008. These locations include Yuma, Tucson, Holbrook, Farmington, NM, Sedona/Cottonwood, Kingman, Casa Grande and Phoenix. The first seminar is scheduled for January 18, 2008 in Yuma. The full schedule will appear on our web site before the end of this year. Please visit our web site at <http://www.eia-az.org> or call 602-437-3737 ext. 123 for information on all upcoming events sponsored by EIA-AZ.

On behalf of the EIA-AZ officers, board of directors and members we would like to extend our warmest wishes to all for a happy and safe holiday season. We look forward with great expectations of prosperity in the New Year for all!



Bill Caveness,
President



www.azind.org

AAI's Environment Committee's next monthly breakfast meeting is scheduled for Wednesday, December 12th at the Fiesta Inn located at 2100 South Priest in Tempe. Breakfast is served at 7:00 AM with speakers beginning at 7:30 AM. Michele Robertson from ADEQ's Ground Water Section will be speaking at the December 12th meeting about revisions to the APP rule and the associated clean closure guidance. There will also be a report on a recent meeting between AAI and Maricopa County Air Quality Department leaders regarding enforcement. Breakfast meetings are also scheduled for January 9th and February 13th. To register contact Dan Romm at (602) 263-0086 X6090. For questions contact Jeff Homer at 480-441-6672.



Jeff Homer,
EHS Committee
Chairman

Jason Bolen
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Extensive Soil Excavation *(Above)*

MP Environmental Services, Inc., recently completed a major excavation of contaminated soil in Sunflower, Arizona. About 6,000 tons of soil, contaminated as a result of a leaking underground storage tank, were removed. The excavated area is approximately 64 ft. deep, and 100 x 100 ft. wide.

Sustainable P2: How to be Green *(Below)*

SAEMS and ADEQ hosted the annual P2 seminar in Tucson on Oct. 4th, 2007, "Sustainable P2 - How to be Green." The day-long seminar was well attended, with speakers on a variety of current P2 topics. The keynote luncheon speaker was Ed Fox, Vice President of Communications, Environment and Safety at APS, on the topic, "Arizona Businesses Advancing Sustainability."

The audience experienced hands-on participation in an interactive break-out session. Attendees divided into smaller groups (photo below) to work on solutions to P2 issues. Leaders from each group presented proposed solutions to the entire audience. For more info., contact SAEMS or visit www.saems.org.



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news briefs

EPA Announces Arizona Enforcement Actions

❖ The US EPA recently announced that its enforcement actions in Arizona for 2007 continue the agency's successful efforts to make polluters achieve on-the-ground improvements to bring environmental and public health benefits for the state's residents.

Leading the year's enforcement accomplishments efforts, include regulating asbestos requirements in schools, enforcing dust control laws and protecting air quality. Polluters committed to more than \$2.82 million to correct environmental violations and prevent future pollution, resulting in over 50,000

pounds of pollutants reduced in the environment.

"The EPA's efforts to control exposure to asbestos and protect air quality in Arizona in 2007 will benefit human health and the environment for Arizona residents for years to come," said Wayne Natri, administrator of the EPA's Pacific Southwest office. "The EPA will continue working to enforce environmental laws, and ensure compliance of environmental regulations to improve public health."

Arizona enforcement highlights for 2007 include:

- **Asbestos in schools:** Seven Tucson charter school operators were fined a combined total of \$67,240 for Asbestos Hazard Emergency Response Act violations. Five other Arizona charter schools paid penalties totaling \$49,200 for asbestos violations. **All failed to conduct inspections to determine if asbestos-containing material was present in school buildings, and failed to have an asbestos management plan.** All of the schools have since taken necessary actions to comply with the law. Each school currently has a management plan, including asbestos location and how schools will properly manage asbestos to reduce risk of exposure.

- **Henry Products paid a \$175,000 fine for releasing excess air emissions.** After the company installed a new polystyrene foam pre-expander that increased the concentration of its volatile organic compound emissions, the facility could not safely operate its VOC emissions control device, and vented VOCs directly into the air. As part of the penalty, the facility installed a state of the art emissions capture and control device to reduce 95 percent of its VOC emissions.

- **Richmond American Homes of Arizona, Inc. paid a \$155,000 fine for alleged dust violations** at five residential construction sites in Maricopa County. The Maricopa County Air Quality Department discovered the violations during routine inspections from 2003 to 2005. The violations included, failing to use a suitable control device to remove dirt from vehicle tires exiting construction sites, not controlling dust generated by construction work, and failing to spray disturbed surface areas with water while conducting earth moving operations on an acre or more.

- **Shasta Beverages, Inc. was fined \$11,900 for failing to file annual chemical inventory forms** with state and local emergency response agencies for chlorine and ammonia stored at its soft drink manufacturing facility in 2003 through 2005.

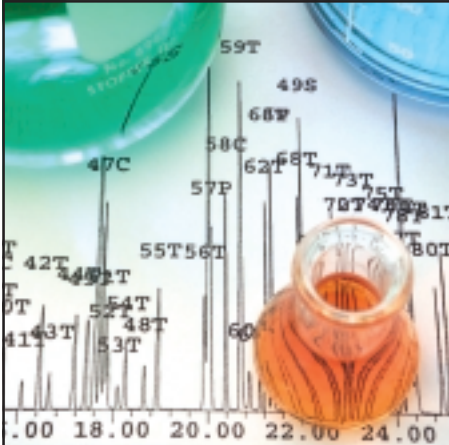
- **Romic Environmental Technologies paid a \$97,000 settlement for violating federal waste handling and storage laws.** The company performs solvent recycling, blending, aerosol can processing, bulking, container crushing, and waste consolidation for off-site disposal

● The EPA

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ordered **Raytheon Company and the U.S. Air Force to clean up a migrating contaminated-groundwater plume at the Tucson International Airport Area Superfund Site**. Under the order, Raytheon, formerly Hughes Aircraft, and the U.S. Air Force are required to treat two solvents, trichloroethylene (TCE) and 1,4-dioxane (DX), in groundwater coming from the 1,365-acre Air Force Plant 44 facility at the southern end of the Superfund site.

● **Underground storage tanks:** The EPA reached expedited settlements, totaling \$14,300 in penalties for **35 underground storage tank field citations**. Eleven of the facilities are in Arizona and 24 are in the Navajo Nation.

Safety-Kleen to Pay \$80,000 Penalty for Hazardous Waste Violations

✦ ADEQ Director Steve Owens and Arizona Attorney General Terry Goddard announced recently that Safety-Kleen Systems, Inc., will pay an \$80,000 penalty for hazardous waste violations at the company's Chandler facility.

During an April 2006 inspection at Safety-Kleen's plant, located at 6625 W. Frye Road in Chandler, ADEQ inspectors discovered that company officials had failed to submit to ADEQ 176 signed generator and transporter hazardous waste manifests. Safety-Kleen previously had been cited by ADEQ for similar violations discovered during a 2005 inspection at the facility.

During the 2006 inspection ADEQ inspectors also found that two 3-inch flange plugs had not been properly tagged with air emission inspection tags and that inspection logs inaccurately stated that the flanges were in compliance with the company's hazardous waste general permit. Safety-Kleen's emergency contingency plan at the facility also contained inaccurate information, such as incorrect telephone numbers.

"These were serious violations of the hazardous waste laws," Director Owens said. "The fact that Safety-Kleen had been cited for similar violations before makes the situation even worse."

"Hazardous waste violations create risks of considerable harm to both the environment and to human health," Goddard said. "This penalty is clearly warranted." In addition to paying the \$80,000 penalty, Safety-Kleen will conduct half-day training seminars for small-quantity generators of hazardous waste like auto repair shops and paint and body shops. That supplemental environmental project will cost the company more than \$15,000.

Safety-Kleen treats and stores waste solvents, cleaners, antifreeze, paint wastes, photo-developing wastes and dry-cleaning wastes collected off-site.

ADEQ Begins Formal Rule-Making Process to Cut Greenhouse Gas Emissions From Vehicles

✦ ADEQ Director Steve Owens announced recently that ADEQ has begun its formal rule-making process to adopt a clean-car program with new standards to reduce greenhouse gas (GHG) emissions from passenger vehicles.

The new rules are being developed pursuant to an Executive Order on climate change issued last year by Gov. Janet Napolitano. The Arizona Climate Change Advisory Group (CCAG) unanimously recommended that Arizona adopt the new GHG reduction standards.

During 1990-2005 GHG emissions in Arizona grew by 56 percent, the fastest rate of growth in the country. If unchecked, Arizona's GHG emissions are projected to grow by 140 percent between 1990-

2020 and by 200 percent between 1990-2040. Roughly 40 percent of Arizona's GHG emissions come from vehicles.

"This is an important step toward reducing greenhouse gas emissions in Arizona and is a critical element in our effort to address climate change," ADEQ Director Owens said. "Our goal is to have a formal draft rule proposed for public comment by the end of this year or early next year, and to have the final rule approved by late spring or early summer."

The rules will apply to vehicles beginning with the 2011 model year. Arizona's rules will be based on the Clean Car program adopted by the State of California. States are authorized under the federal Clean Air Act to adopt California's vehicle emissions standards. In addition to California, 11 other states have adopted the California GHG vehicle standards. They are Connecticut, Maine, Maryland, Massachusetts, New York, New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont and Washington. Along with Arizona, at least four other states – Colorado, Florida, New Mexico and Utah – also have announced plans to adopt the California GHG vehicle standards.



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The "Seller-Doer"



I recently had the opportunity to talk with two senior managers from different consulting firms and the conversation, in both instances, turned to the concept of the "Seller-Doer". Their polarized opinions about the topic intrigued me so I thought I'd spring-board it into this installment of "Prospecting".

The basic concept of the "Seller-Doer" is a person who is responsible for developing business and conducting some portion of the work. It is a business development structure embraced by some consulting firms for a variety of reasons, one being that a portion of the overhead costs for the business development effort can be recuperated through billable time. Most senior-level personnel at consulting firms are responsible for business development in some form. I guess you could say they're all "Seller-Doers" to some degree, but I am referring to the people whose primary responsibility is to bring in new business and to meet billable targets. That is where, I feel, things start to conflict.

I have a great deal of respect for the successful "Seller-Doers" I've met in my career. They are typically extremely bright and highly motivated, with a unique mix of technical and business savvy that bring tons of value to their organization. From a management standpoint though, I'm not convinced it is the best formula for developing business over the long haul.

The problem is one of momentum. The goal of any good business development program is not only to win new business, but to generate and maintain a steady influx of new opportunities. Once a "Seller-Doer" achieves success in business development efforts and business is good, he/she is faced with time constraints associated with "doing" and can spend less time "selling", resulting in a loss of momentum. As business tapers off, he/she scrambles to set appointments and catch up on lingering contacts - a significant amount of time can be spent regaining momentum. This can result in a delay in closing new business, leading to back-log and revenue curves with peaks and valleys.

To me, it seems more productive to have certain people specialized in developing business and others specialized in delivery. Does it add to overhead? Sure, but, in the long run, it establishes a framework to better sustain the business development effort. This structure also allows companies to be more nimble in exploring new markets and pursuing additional service lines outside their core business. Additionally, it provides management the opportunity to establish long term business development goals with the confidence that they'll be constantly pursued by specialists whose sole job it is to focus on getting there, and with a lower risk of getting distracted.

Thanks again for reading and keep the suggestions coming.

Joe Holmes is National Director of Sales & Marketing with Environmental Data Management. Joe can be reached at 480-315-0227.



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“Essentials of Hazardous Materials Management”



Dates: MAY 5 - 9, 2008
Presented by: ACHMM - Thunderbird Chapter
Location: TBD

This 4-day course offers an intensive review of environmental laws, regulations and health and safety principles for Environmental and Safety professionals with responsibility for Hazardous Materials Management. Many EH&S professionals take the ***“Essentials of Hazardous Materials Management”*** course to satisfy training requirements, enhance competence, and obtain information regarding rules and regulations. Course instructors typically include practicing EH&S professionals who have been selected from business, industry, academia, and government agencies.

“Essentials of Hazardous Materials Management” topics include:

- Chemical and Physical Properties of Hazardous Materials
- Sampling and Laboratory Analysis of Hazardous Materials
- Environmental Assessments
- Waste Minimization and Pollution Prevention
- Environmental Laws and Regulations
- Resource Recovery and Conservation Act (RCRA)
- RCRA Corrective Action and Treatment Technology Selection Guidelines
- Underground Storage Tank (UST) Management
- National Environmental Policy Act (NEPA)
- Hazardous Materials/Hazardous Waste Transportation
- Toxic Substances Control Act (TSCA)
- Clean Water Act (CWA)
- Safe Drinking Water Act (SDWA)
- Groundwater Contamination and Hydrology
- Clean Air Act (CAA)
- Storm Water Discharge Regulations and Oil Pollution Prevention Act
- Toxicological Principles
- Industrial Hygiene
- OSHA Requirements for Hazardous Materials Managers
- Radiation Principles and Mixed Waste Management
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- HAZWOPER and Emergency Response
- Emergency Planning and Community Right-to-Know Act (EPCRA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Management Systems and Tools

Is this course also helpful for preparing for CHMM Certification?

This course is very helpful for preparing for CHMM certification. Environmental programs are vital to public health and safety. The management of hazardous materials requires proven and unquestionable skill and competence. Quality control over professionals involved in programs of national importance and public safety is best accomplished through professional certification.

The **CHMM** is one of the most widely-recognized certifications in the industry.

The registration deadline for ***“Essentials of Hazardous Materials Management”*** is **April 4, 2008**

For details, applications, and course fees: www.thunderbirdchmm.org,
or call Dwight Clark @ (602) 243-1600 or dclark@ninyoandmoore.com

Note: Registration for this course is separate from the IHMM exam application process.



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