

Safety Insider

MARCH 2008

MEETING
TIME AND
LOCATION

Wednesday

Apr. 16, 2008

11:30 am— 1:00 pm

Arthur's Restaurant

2875 Lakeview Dr.
Santa Clara.

For Directions,
go to
www.baesg.org

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April Meeting Announcement

Behavior Based Safety

What is it? How is it Implemented? Expectations and Pitfalls. Success Stories and Case Histories.

Amy Zysk's educational background is in Chemistry and she has worked in the Environmental Industry for the last nine years providing training, emergency response coordination, HazMat and hazardous waste management; and EHS management in Colorado and Northern California.

Ms Zysk spent the previous six years at Ball Corporation as a manufacturing plant Environmental Health and Safety Manager. Her responsibilities included Title V Air Permitting, Wastewater Treatment Permitting, oversight of the company Waste Water Treatment Plant, Storm Water

Presented by

Ms. Amy Zysk –
Senior
Environmental
Engineer at
Clorox
Services
Company



Regulations, Hazardous and Non-Hazardous Waste Management, OSHA Compliance including HAZCOM, HMBP, Confined Space, and Respiratory Protection.

Ms. Zysk recently joined Clorox Services Company in the capacity of the Sr. Environmental Engineer for the Pleasanton, CA site. A few of her key responsibilities include: company compliance with local, state, and federal regulatory agency standards; implementing company environmental and safety programs; and employee training, documentation, and record keeping.

Editors Corner

My current job responsibilities recently took a turn in direction. I am now responsible for "corporate" EHS at my employer. This means that, in addition to responsibility for our facility here in Fremont, I now also have EHS oversight for a recently acquired factory in China. I will be facing many great challenges in this effort, and my management is offering great support. One of the expectations is that I visit there several times this year to move things in the right direction. I have already made one trip over there to get acquainted, and I experienced an Incredible culture shock. Things are done very differently over there, and have been doing

Editors Corner (continued from p. 1)

things a certain way for a long time and are quite reluctant to change (as are people everywhere).

There is no Home Depot or Orchard Supply Hardware. Tools and supplies are purchased from small business owners who occupy stalls in large shopping complexes that remind me of the flea markets here in town. All efforts at haggling on the prices by my Chinese co-workers were rebuffed by the shop owners, who figure that since they are accom-

panied by a “white” man, that we could afford to pay “retail”.

We always joke about poorly made items being “made in China”, but I found that what is sold in China often is even lower quality than items that are made for export.

I had many other interesting and eye-opening experiences, which I plan to share in future columns. These will focus more on the daily living events rather than EHS fo-

cused experiences, because I felt that they were truly unique.

On another note, I realized after publication, that the article on **Paul Burnett**, our original webmaster and a lifetime member receiving the Safety Professional of the Year award was truncated. I have re-printed it again in its entirety in this issue to provide the full picture.

Roy Dojahn

BAESG Newsletter Editor
& Jobs Coordinator

Safety Professional of the Year (Revisited)

Paul Burnett, Safety Program Administrator, Santa Clara Valley Water District, San Jose, has been a pioneer in health and safety training and consulting and a tremendous resource. Safety Center President, Liz McClatchy noted that Paul advises the center on training requirements and regulations for the Cal/OSHA 8



course. Paul has taken time out of his busy schedule to be a presenter at our symposium events and has developed a website and links that even Cal/OSHA utilizes as a reference. Paul has been a friend and colleague to Safety Center Incorporated for many years and we look forward to many more years of affiliation.

Paul receiving the award

Release of Interpretive Guideline for Hand-to-Mouth Transfer of Lead Through Exposure to Fishing Tackle

From the Proposition 65 Listserv, March 13, 2008

The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) is the lead agency for the implementation of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). OEHHA received a request from the Sports Fishing Coalition for guidance on calculating hand-to-mouth transfer of lead exposure from the handling of fishing tackle products during recreational use. The request was made pursuant to Title 22, California Code of Regulations, Section 12204. OEHHA released a draft Interpretive Guideline in May 2007 for public review and comment, and held an informal workshop on August 1, 2007 as an opportunity for providing oral comments on the draft guideline. Both written and oral comments on the draft guideline were received during the comment period. The Proposition 65 Interpretive Guideline No. 2008-001: Guideline for Hand-to-Mouth Transfer of Lead through Exposure to Fishing Tackle Products released today reflects consideration of the comments received.

A copy of Interpretive Guideline No. 2008-001: Guideline for Hand-to-Mouth Transfer of Lead through Exposure to Fishing Tackle Products and of OEHHA's responses to comments received on the draft Interpretive Guideline can be obtained from OEHHA's Proposition 65 Implementation Office at the address and telephone number indicated below, or from the OEHHA web site at [Http://www.oehha.ca.gov](http://www.oehha.ca.gov) You are receiving this email because you are subscribed to the Proposition 65 listserv. If you would like to unsubscribe please go to: <http://www.oehha.ca.gov/Listservs/default.asp>

What Level of Compliance is acceptable

Do you know what 99.9% compliance means? As quoted from Jeff Dewar of Dewar International and Mike Rubell of the National Compliance Institute, in the United States it would mean:

- One hour of unsafe drinking water per month
- Two unsafe landings at O'Hare International Airport each day
- 16,000 lost pieces of mail per hour
- 20,000 incorrect drug prescriptions each year
- 500 incorrect surgical operations performed each week
- 15 newborn babies dropped at birth by doctors each day
- 22,000 checks deducted from the wrong account each day
- Your heart fails to beat 32,000 times each year

Imagine what this means in light of your requirements for Occupational Safety: Machine Safeguarding, Lock-out/Tagout; Confined Space Entry; etc. - Can you afford to be anything less than 100% compliant?

Mapping Tool Allows Emergency Management Personnel to Visually Track Resources

From Space Daily, 01/17/08

The Georgia Tech Research Institute (GTRI) and Emergency Visions of Atlanta have developed a mapping tool that allows emergency management officials to track the location and availability of resources like hospital beds, transportation equipment, water, and personnel during an emergency.

The Geographic Tool for Visualization and Collaboration (GTVC) can, for example, track a chemical plume and help emergency management plan appropriate evacuation routes. In an emergency, electronic feeds alert users to new incidents and show the location of events on a map in real-time. Users' actions are recorded so that the data can be utilized to improve planning for the future.

The tool was first developed for military applications but has since been tweaked to accommodate emergency response. The Florida Division of Emergency Management selected the tool in June 2007. Subsequently, GTVC was improved to provide new capabilities, like real-time tracking of mobile assets with global positioning system and warehouse resource management.

"We will soon be adding an option to allow users to provide their own custom topographic, photographic or aerial maps," says Kirk Pennywitt, a senior research engineer in GTRI's Information Technology and Telecommunications Laboratory. For now, users can view street maps, aerial imagery, or a combination of both.

The Georgia Emergency Management Agency; Hillsborough County, Fla.; and Dakota County, Minn. are also using the software. Pennywitt says that more than 100 other cities, counties, and agencies have expressed interest in the tool.

Virtual-World Emergency Training

One size fits all works for some clothing, but not for incident command training.

By Marc Barrera · January 2008

In 2004, the U.S. Department of Homeland Security, under presidential order, instituted the National Incident Management System. This nationwide initiative was targeted at getting federal, state, tribal, and local governments to work together to prepare for, prevent, respond to, and recover from domestic incidents, such as terrorist attacks or natural disasters.



ICS Training simulation allows users to play one of six available first responder roles in a choose-your-own-adventure style of gameplay.

One of the requirements for compliance was that these authorities had to institute Incident Command System training across all of their emergency services, such as EMS, fire service, law enforcement, and other emergency management response departments, in preparation for becoming FEMA-certified in ICS/IS levels 100 and 200. But the comprehensive nature of this training presented unique obstacles for many emergency services to tackle: How do you individually train someone to work not only in a team, but as part of a group of coordinating agencies? Does learning from a three-ring binder or traditional classroom setting have a realistic chance of success?

Wearing Many Hats

In answer to such questions, the new 3D simulation ICS Training Series training tool from California-based Visual Purple has taken instruction off the page and placed it in a simulated real-world environment that puts the user in the middle of the action. No matter which department they work in, users can choose to play the training simulation in any one of six available first responder roles—Fire Chief, Police Chief, EMS Chief, EMA Chief, Hazmat Chief, and Public Health Officer.

In addition, the simulation employs a choose-your-own-adventure style of gameplay. “No matter what type of first responder they are, whether it’s fire, police, hazmat, or public health, they’re not only learning their own role in an incident, but they’re also learning the role of other first responders,” said Megan Rutherford, business development director. “It brings a kind of a real-world interaction that they normally wouldn’t get unless they were in an actual incident.”

The series features three simulations, supplemented with PDF documents that users can access and print as they become relevant, that take place in the fictional small town of Belserville. At various points in the simulations, users are presented with choices on the best course of action to take. These choices will depend on the character the user has chosen, and the user’s responses can result in a variety of outcomes. “There’s no right or wrong answers, necessarily,” Rutherford said. “A lot of the questions are just determining what they would do in an actual incident. Basically, we like to refer to it as awareness-level training.”

The first simulation is the longest of the three. Titled “ICS: Foundations,” it is designed to prepare the user for ICS level 100 certification. In it, all of the first responder characters are gathered around a conference table interacting with a WMD expert as he gives a presentation on all possible threats and hazards the group may face.

The second simulation, “ICS: Plan For Action,” is the first part of the series ICS level 200 instruction. It picks up immediately where the players previously left off and begins walking them through the process of creating a response plan.

The last simulation, “ICS: Call To Action,” wraps up the ICS level 200 training by having all of the previous lessons come into play in a real-time scenario in which all characters must work together to respond to a fire at a chemical factory that could have dire consequences for the surrounding community.

Low Cost and Portability

Beyond its ability to deliver instruction through many different hats, the tool has other benefits in its favor. Rather than spending as much as \$20,000 to pay someone to train your staff, plus covering the cost of lost work hours, clients can purchase the product for \$59.99 per user license (up to nine), Rutherford said. For 10 to 99 licenses, the price drops to \$49.99 each. User licenses last five months but can be renewed for an additional seven months for \$9.99 each.

Portability is a second benefit—because the tool is completely browser-based and there is no equipment to buy, users can learn at their own pace around their often erratic schedules,

“On their downtime, while they’re waiting on their next call, they can just go online and play for an hour, save the game, and then come back to it at a later time. So, it’s not something that they have to sit down and allot the whole eight hours of time to do. They can do this at the firehouse, they can do this at home, et cetera.”

For more information or to view online demos, visit www.visualpurple.com.

Facing the Unthinkable: Fatality Prevention in the Workplace

From Occupational Hazards, January 1, 2008

By Laura Walter

How workplace culture, organizational systems and leadership affect the risk of fatalities, and what safety professionals can do to prevent deaths.

No employer, family member or coworker ever wants a fatality to occur in the workplace. But it happens. In 2006 alone, 5,703 people died on the job, representing a multitude of poor choices and system failures that might have been avoided with better information or preparation.

Preventing workplace fatalities is the indisputable goal of any safety management system, but too often, the system breaks down. Employers fail in their leadership roles, well-meaning safety managers approach fatality prevention from the wrong direction or employees develop feelings of invincibility and the unthinkable occurs: someone dies on the job.

Indiana University of Pennsylvania (IUP) and the Alcoa Foundation hosted an event last November to establish a dialogue about occupational deaths. The two-day Fatality Prevention in the Workplace Forum, which attracted more than 150 safety professionals and industry leaders, was the starting point for a discussion of the causes of fatalities, the best ways to prevent them and suggestions for future areas of research. Occupational Hazards spoke to some key presenters from the forum to determine exactly what companies, safety professionals and employees should be doing to prevent the unthinkable.

Frequent vs. Fatal

Fred A. Manuele, president of Hazards Limited, presented his research on workplace fatalities and serious injuries at the IUP forum. One of the biggest myths he set out to discredit is that reducing frequently occurring injuries also will prevent serious or fatal incidents.

Manuele says this approach “has been proven untrue” and stresses that fatal incidents often occur during non-routine tasks, the type safety professionals may have the least experience dealing with. And even if a company has a stellar safety history when it comes to serious incidents, it can be risky to take comfort in rates.

“You should not be deluding yourselves that you don’t have serious injury potential just because your rates are down,” Manuele warns.

Lon Ferguson, chair of the IUP safety sciences department and a key organizer of the fatality forum, agrees that injury rates can be misleading or can create false reassurance. He particularly questions the fact that total recordable rates seem to be decreasing across the board, but fatality rates aren’t following suit at the same pace.

“Why isn’t there more of a relationship?” Ferguson asks. “The fact is that it’s very difficult to hide fatality data, but you can play games with rates.”

While Ferguson isn’t suggesting that dishonest rate reporting is a widespread problem, he acknowledges the possibility. “Someone has to at least think about that as a possible option,” he says. After all, Ferguson explains, companies are under pressure to get their injury rates down – and keep them down.

Jeff Shockey, corporate safety director for Alcoa, points out the risks associated with relying too heavily on a successful safety past. “It’s easy to sit back and feel good about total recordable rates, or OSHA compliance, or having passed the last ISO audit, and be lulled into a sense of overconfidence,” he says. “But fatalities are a different animal. They don’t care if you have the lowest total recordable rate.”

To prevent fatalities, Manuele thinks safety professionals must be willing to change the way they look at incident prevention. “They have to change the philosophy that says what we have in place is adequate,” he says. He also debunks the myth that worker causes are the principle contributors to fatal incidents. In reality, he believes “the system is the problem, not the worker.”

What exactly is wrong with the system? According to these experts, economic and investment pressures, turnover, leadership, global competition and downsizing play big roles in the likelihood of workplace fatalities.

A Fatal Environment

Manuele says that non-routine work, upsets in regular work, non-production capacities and work involving sources of high energy make up the situations most likely to lead to fatal incidents.

Other contributing factors also influence the risk of fatal and severe incidents:

- Leadership. Ferguson explains that a lack of senior management ownership and the failure to hold safety as a core value can chip away at safety management systems. And as many safety professionals know, these breakdowns can lead to fatalities. “Sometimes leadership doesn’t realize the impact on safety culture,” he says.

- Turnover. If a leader only is with the company for a few years, he or she has time to make decisions that will impact safety without being there long enough to see the consequences of those decisions. Employee turnover also contributes to the problem. Workers who stay with a company long term absorb the culture, including safety practices, but today's more transient environment eliminates that benefit.
- Employee-Employer Ratio. Shockey points out that the ratio of employees to employers is increasing in many companies. Picking up extra work – and extra employees – means leaders and managers have a larger span of control. It also means limited time for them to mentor, teach and observe their employees, which could contribute to deadly workplace situations.

And, as is common with many factors that contribute to organizational breakdown, economic issues are often to blame.

Economic Pressure

When companies downsize and grow leaner, safety inevitably takes a hit. Manuele explains that these companies feel they are running short – so short, in fact, that they don't have enough staff to maintain the organization, much less a safety program. As companies are expected to churn out faster and cheaper production, it can create an atmosphere rife with the possibility of severe injuries or fatalities.

"[Forum] participants indicated the shift in focus where production takes a priority over safety seems to be occurring on a more routine basis," Shockey explains. "The globally competitive nature of world economy really puts pressure on folks to do more with less – less money, less people, less resources."

Shareholders and stakeholders also have an impact on the likelihood of fatalities. "It appears investors are looking at the short-term focus and are primarily profit-oriented," Shockey says.

He adds that in some cases, environmental managers receive incentives while the safety department is left out in the cold. "[Shareholders] want to see companies controlling costs and want them to be green. As a result, fatality prevention often competes with cost reduction and the environmental focus," he continues. "Our profession has begun to ask: Where's the tax incentive for protecting people, as compared to environmental tax incentives for industry?"

Who's at Risk

By identifying the employees most likely to be involved in a fatal or serious incident, safety professionals can target their efforts to the employees who need appropriate training or education.

- New Employees. "People new to the job have a fairly high risk profile," Shockey says. Developing a comprehensive new employee orientation process and focusing training on life-threatening risks could have a positive impact on fatality prevention.

- **Contractors.** Contractors also are at a higher risk to be involved in a serious or fatal incident. While many contractors may have excellent safety records, Shockey points out that “generally speaking, anytime contractors are on a plant site, it increases the risk.” After surveying forum participants, Chris Janicak of IUP found that contractors who do not work under the employer’s watchful eye especially face an increased risk for fatalities. “A lot of the fatalities involved contractors that were not under [the employer’s] supervision,” he reveals.
- **Outsourced/Temporary Employees.** Outsourcing employees or using temporary manpower means employing people who are not familiar with either the processes or the risks inherent in the job.
- **Workers Logging Overtime.** Employees who work more hours trade off the benefit of added production with fatigue and an increased likelihood of incidents.
- **Risk Takers.** Industries with a history of tolerating risk-taking cultures, Ferguson explains, attract risk-taking employees. Even worse, Ferguson says the presence of both “internal and external rewards for risk-taking” can affect safety processes. Employees actually may be most vulnerable when they feel invincible.

Best Practices to Prevent Fatalities

In light of all these risks and contributing factors, protecting employees from fatal and serious incidents is clearly a challenge. Of course, no one said it wouldn’t be complicated.

“Safety professionals are trying to get ahead, trying to learn to predict where the vulnerabilities are – it’s not an easy task,” Shockey admits. Here are a few ways employers and safety professionals can start to tackle the task of achieving better fatality prevention.

1. **Stand Up to Ownership.** Safety managers’ best defense against fatalities may be their willingness to keep the lines of communication open. “We safety professionals have to have the strength of character to say to managers, ‘this is what is happening to the safety management system’ if it is deteriorating,” says Manuele.
2. **Evaluate Near-Hits.** Manuele stresses the importance of implementing near-hit systems to learn from potentially fatal incidents that almost happened. He believes workers should be “encouraged to bring forward things they’ve noticed about incidents that could cause severe accidents” to prevent such a close call from happening again.
3. **Engage Employees.** According to Shockey, involving employees in the process could help save lives. “We hear [that] with a fairly engaged culture, the chances are the safety aligns,” he says.
4. **Risk Assessment.** “Every company should develop a life-threatening risk program,” Shockey says. Companies that conduct pre-job risk assessments seem to report better results. Risk assessment particularly is important for non-routine tasks..
5. **Training and Education.** The academic world could influence workplace fatalities by offering more safety education. “Every future engineer or every craft apprentice needs to have health and safety training, but few universities include that in their curriculums. Apprentice programs and vo-tech schools do better. In the end, industry has to make up for those gaps by offering training when they come in,” Shockey continues.

6. **Observe Employees at Work.** Shockey also stresses the importance of observing workers on the job to ensure they are engaging in safe practices. "People are starting to realize it's not about the number of observations you do, it's the jobs you observe," he says. "Maybe you observe new employees or non-routine work; target your observations where the risk is." At Alcoa, for example, Shockey knows roof work is risky, so they target employees working on roofs. "The more you observe, the less often people seem to deviate," he says.
7. **Rely on Leading Indicators.** These three experts urge safety professionals to study leading indicators, rather than lagging indicators (like total recordable rates) to better assess the risk of fatalities and serious injuries.
8. **Design for Safety.** Ferguson points out it is imperative to plan for safety "in the engineering and design phases, instead of after the fact."

The Challenge

"The first failure is the fatality," Shockey says. "The second failure is when we can't learn from it or share it to prevent future catastrophic incidents."

Conducting research on risk assessment and fatality prevention could help safety professionals learn how to prevent these tragedies. Specifically, Shockey cites a need for better NIOSH data and Bureau of Labor Statistic data, as well as a global database of fatality information and research on risk assessment tools and what triggers the chain of events leading to fatalities. He adds that a national fatality database, which would provide open, anonymous information about fatalities, would be valuable.

"We need research that defines what deficiencies exist in the global interface," he says. More research is important because, as Shockey points out, fatalities can be subtle and show up where employers and workers least expect them. That's why Shockey issues a challenge for safety managers to take responsibility.

"I would challenge every safety professional to spend a portion of every day seeking to identify where their next fatal exposure might be," he says.

A fatality only takes one moment, one misunderstanding or one oversight to occur. Once this moment passes, safety managers, employers and coworkers have a choice: blame the fatality on something out of their control, or take action to avert another death. Until prevention methods are put into place, another unexpected fatality could strike again – and it's a problem that can't be reversed.

"You can fix a broken finger or a cut," Shockey says, "but you can't fix a fatality."

DOT: More Truck Drivers Buckling Up Than Ever Before

from Occupational Health and Safety March 26, 2008

The number of professional truckers buckling up their seat belts jumped dramatically in 2007 to a record level of 65 percent, U.S. Secretary of Transportation Mary E. Peters announced during a national conference of state commercial vehicle law enforcement officers.

"Seat belt usage among commercial motor vehicle drivers rose to a new high of 65 percent," Peters said. "Though we've made great strides, we won't rest until 100 percent of commercial motor vehicle drivers wear a seat belt 100 percent of the time."

Currently, 82 percent of passenger vehicle drivers wear seat belts. A survey conducted in 2003 found that only 48 percent of truck drivers used seat belts. In 2006, this figure had improved to 59 percent. The results announced today by Secretary Peters were the findings of the largest and most comprehensive study ever conducted.

Peters credited the increased seat belt usage in part to the creation of a coalition established by the Department in 2003 with the purpose of increasing seat belt usage among truck drivers. She also credited a 2007 public service announcement the Department produced starring NASCAR driver Rusty Wallace for helping to raise seat belt awareness among truck drivers.

To download print, audio and video copies of the FMCSA-Rusty Wallace public service announcement, or to obtain a copy of the "Seat Belt Usage by Commercial Motor Vehicle Drivers 2007 Survey" announced today, visit www.fmcsa.dot.gov.

Shell demonstrates potential of earth observation satellites to measure sustainability

From: European Space Agency, Published Mar. 25, 2008

Shell Canada has incorporated Earth Observation data into its Sustainable Development Report, demonstrating the potential of satellites to provide a global and cost-effective way to measure objectively the sustainability of business activities. Companies that aim to create wealth while also contributing to the long-term quality of life and respect for the environment regularly issue environmental audits of their Corporate Sustainable Development (CSD) activities and report on the 'triple bottom line' of economic, social and environmental impacts.

In order to quantify sustainability, accurate and timely information on the state of the environment is needed, which Earth Observation (EO) from space can provide.

'Unbiased, timed satellite images help build stakeholder trust because they clearly illustrate the activities taking place in our oil sands mine leases,' Ashley Nixon, Sustainable Development Integration Manager at Shell Canada, said.

'They present clear, accessible visuals, provide objective information on development and eventual reclamation of our oil sands leases and help us in our reporting on environmental performance.'

In 2005, ESA began working with large multinational companies as part of its Earth Observation Support for Corporate Sustainable Development Reporting (EO-CSD) project to integrate satellite data into CSD reporting practices across a wide variety of industrial sectors.

Under the project, Hatfield Consultants, an environmental consultancy firm based in Canada, led a team working with Shell Canada and Albion Sands Energy to provide EO-based geo-information to support environmental management and monitoring related to the exploitation of their Athabasca oil sands located in the north of the province of Alberta. Occupying some 141 000 sq km, the Athabasca oil sands are estimated to be the second largest known oil reserves in the world after Saudi Arabia.

These bitumen-saturated sand deposits represent the equivalent of between 17 and 25 trillion oil barrels, although unlike conventional crude oil they need to be mined or extracted in situ rather than simply pumped to the surface and then specially treated before they can be transported via pipelines.

As global oil reserves dwindle, the cost of extracting Canada's oil sands has become feasible: one million barrels of oil are currently extracted daily and this figure has the potential to double in the next five to seven years. However this extraction should be carried out while managing the impact on the Alberta landscape.

Eyes in the sky

EO provides objective coverage across both space and time, EO images show the world through a wide-enough frame so that complete large-scale phenomena can be observed with great accuracy. Satellites also remain in place for long periods, making them able to highlight environmental changes occurring gradually.

The focus of the satellite data used in this project was to help quantify habitat change in various ways and to understand how a habitat may be influenced by the oil sand operations.

ESA's Envisat satellite acquired eight Full Resolution images with its optical instrument, Medium Resolution Imaging Spectrometer (MERIS), covering the entire northern oil sand region, from 2004 to 2006. Envisat's Advanced Synthetic Aperture Radar (ASAR) instrument acquired three alternating polarisation images, one in 2004 and two in 2006. SPOT-5 acquired five multi-spectral images of the same region, an area of approximately 18 000 sq km, in 2006.

The before-and-after images record the development of oil sand activities at the Muskeg River Mine and Jackpine Mine in the Athabasca region of northeast Alberta.

According to Shell, the images allowed them to monitor vegetation, track land use changes, capture roads, power lines and other installations that can fragment habitat. They also provide them with the capability to establish baseline environmental information before developing new areas.

Based on EO image analysis, mine activity and vegetation habitat change information was provided for the 2006 Shell Canada Sustainable Development Report, which was developed in accordance with the 2006 guidelines of the Global Reporting Initiative (GRI). The GRI provides a framework for sustainability reporting, which includes a set of reporting guidelines to enable reporting on economic, environmental, and social performance.

The EO-based information provided as part of the project, sponsored by ESA's Earth Observation Market Development (EOMD) Programme, was independently audited.

'Using 2006 as a baseline, mine development and progressive reclamation will be monitored every year. In addition, Shell will share learnings with industry associations to help establish best practices for sustainable development reporting,' Shell said in a statement on its website.

Knowledge sharing

The EO information is not only valuable for corporate environmental management purposes, but can also provide local residents with unbiased information regarding the impact of developments in their communities.

Therefore, the EO-CSD project team continues to work with local Aboriginal communities to demonstrate how EO can be used as part of Shell Canada and Albian Sands corporate commitments to sustainable development.

Traditional ecological knowledge (TEK) documented by the Fort McKay First Nation (FMFN), whose traditional territory borders Shell's leases, was integrated with the satellite imagery with the aim of improving the ability of the community to monitor developments and reclamation on or near their traditional territories.

'In partnership with the FMFN, Shell will reclaim and restore mined areas by integrating satellite images with their traditional environmental knowledge,' Darrell Martindale, Manager of Environment and Regulatory Compliance at Albian Sands, said. 'The FMFN can then monitor current and proposed developments and reclamation plans on or near their traditional territories.'

World air filter market may exceed \$7 Billion in 2010

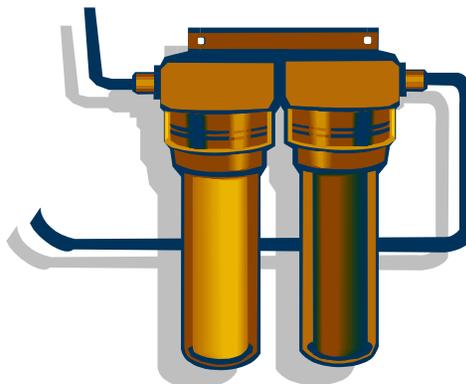
From: Global Industry Analysts, Inc., (GIA) , Published Mar. 24, 2008

Global demand for air filters and filtration equipment has been witnessing healthy growth, according to Global Industry Analysts, Inc. of San Jose, Calif. Besides the industrial regulations, demand for air filters comes from the threat of bio- and chemical terrorism and risks of Severe Acute Respiratory Syndrome. Filters that not only capture but also kill microorganisms are being commercialized.

The worldwide market for Air Filters and Filtration Equipment is projected to exceed US\$7.1 billion in 2010, as stated in a recent report published by Global Industry Analysts. Buoyed by the burgeoning Chinese market, Asia-Pacific is expected to offer the highest growth opportunity with a compounded annual growth rate of over 7.5 percent.

Developed regions are expected to offer relatively lower growth opportunities. Automotive air filters market account for over 41 percent of global demand for air filters. In cartridge air filters market, Japan is expected to register the fastest growth over the period 2000-2010 with sales exceeding \$35 million in 2010.

'Air Filters And Filtration Equipment Market: A Global Strategic Business Report', published by Global Industry Analysts, Inc., provides a comprehensive review of market trends, product profile, recent developments, mergers, acquisitions, profiles of major players and other strategic industry activities. Product segments independently analyzed include automotive air filters, cartridge air filters, electrostatic air filters, fabric air pollution filters, HVAC air filters, and other air purification filters.



Title 22 CCR § 12000-14000, Proposition 65

The Office of Environmental Health Hazard Assessment (OEHHA) is the lead agency for implementation of Proposition 65 (The Safe Drinking Water and Toxic Enforcement Act of 1986, Health and Safety Code section 25249.5, et. seq., hereafter referred to as Proposition 65 or the Act). As part of its responsibilities related to Proposition 65, OEHHA maintains the regulations implementing the Act. These regulations can be found in Title 22 of the California Code of Regulations, sections 12000-14000 inclusive.

OEHHA is proposing to move the Proposition 65 regulations from Title 22 to Title 27 of the California Code of Regulations (CCR). In 1987 the original lead agency for implementation of Proposition 65 regulations was the Health and Welfare Agency. For this reason, the Proposition 65 regulations were placed in Title 22, together with other Health and Welfare regulations. In 1991, Governor Wilson designated OEHHA as the lead agency for Proposition 65 implementation when OEHHA and its parent entity, the California Environmental Protection Agency, were established. The regulations have remained in Title 22. Placing Proposition 65 regulations in Title 27, together with other environmental regulations, would facilitate future searches by stakeholders. This is a non-substantive renumbering process; no material changes will be made to the regulation as part of this action.

OEHHA is offering an opportunity for the public to comment on this proposed non-substantive change.

Interested parties may submit their comments or suggestions concerning the renumbering of the Proposition 65 regulations by 5:00 p.m. on April 28, 2008. All submissions should be directed to:

Fran Kammerer
Staff Counsel
Office of Environmental Health Hazard Assessment
1001 I Street, MS# 25B
Sacramento, CA 95816
Or via e-mail to fkammerer@oehha.ca.gov Title 22 CCR § 12000-14000, Proposition 65

Federal Regulatory Updates

Final Rule Issued Jan 7, 2008 Revisions to the List of Hazardous Substances and Reportable Quantities

The final rule revised and corrected the List of Hazardous Substances and Reportable Quantities (172.101 Appendix A). These revisions reflect changes made by the EPA to the list in the Hazardous Materials Table in 40 CFR 302.4. PHMSA also corrected past errors in this list. The Final Rule reprints the list in its entirety. The effective date is 03/31/2008.

For free reprint of this Federal Register, see:

<http://www.hazmatpublishing.com/FederalRegisterReprintService/07-6297.pdf>

Upcoming Events

If you'd like to see your events advertised in this space, and on our website, email your announcement to: baesg.jobs@gmail.com

Local Events:

Environmental Training Center has the following training courses/seminars coming up at Mission College (For more information see: <http://www.rebrac.org/>)

Apr 11 Underground Storage Tank Designated Operator Exam Preparation
Apr 18 Title 22: Hazardous Waste Management
Apr 18 8 Hour: OSHA HAZWOPER Refresher
Apr 25 DOT 49 CFR Hazardous Materials Transportation

UC Santa Cruz Extension has the following training courses/seminars coming up in Cupertino (For more information see: <http://www.ucsc-extension.edu/>)

Apr 25 – May 3 Environmental Fate of Pollutants
Apr 9—Apr 30 Safety and Health Program Development and Implementation

AIHA - Northern California Section 2008 Symposium: Occupational Health Aspects of Nanotechnology

Dr John Howard, Director NIOSH, is the keynote speaker.
Wednesday, May 14, 2008, at SRI International in Menlo Park.

Pacific Industrial and Business Association will be sponsoring the following seminars at various Bay Area Locations. (For more information see: <http://www.piba.org/>)

Apr 3 X-Ray Radiation Safety For the Industrial Hygienist / Safety Engineer / X-Ray Technician
8:30am – 4:30pm; Roche Palo Alto 3431 Hillview Ave, Room A2-1, Palo Alto, CA 94304
Apr 29 NFPA 70E Seminar– Time and Location to be Determined
May 28 DOT & NRC Requirements for Shipping Radioactive Materials (co-sponsored by the **Radiation Safety Academy** (call **800-871-7930** to register)
7:45am – 5:00pm; Roche Palo Alto 3431 Hillview Ave,
Apr 17 **Venue Protection, Protecting the Public with Real-time Safety Solutions**

Free Webinar presented by Occupational Hazards Magazine and Sponsored by RAE Systems.
Tuesday, 11:00 PST Register at:

<https://event.on24.com/eventRegistration/EventLobbyServlet?target=registration.jsp&eventid=106842&sessionid=1&key=021C1D43A4C3C939C975A10E3B7BB467&partnerref=oh1&sourcepage=register>

It's every first responder's toughest challenge; how do you monitor hazardous incidents and ensure the public safety at major venues in real-time? It is not easy, given the multiple technologies and amount of data available today. This presentation provides an overview of existing detection sensor technologies and decision support tools for hazardous area monitoring, with emphasis on real-time integration and interpretation. A systematic approach for identifying unknown environments by merging these different sensor technologies is discussed, and benefits including increased safety, efficiency, and command control are highlighted.

National Events:

- April 16 – 17** **Hearing Conservation Strategies, Acoustic Associates Ltd.**, Chicago;
<http://www.acousticassociates.com>
- April 25 – May 2** American Association of Occupational Health Nurses Symposium and Expo, Salt Lake City, Utah; For more information see:
<http://www.aohn.org/education/symposium-expo/index.cfm>
- Apr 27 – May 01** **The Risk and Insurance Management Society annual conference and exhibition.**
This San Diego event features 400 expert speakers and more than 130 educational sessions addressing priorities for risk managers, including pandemics; disaster recovery; climate change; globalization; and political and public entity risks. For more information, see: <http://www.rims.org/Template.cfm?section=AnnualConference1>
- May 31 – Jun 05,** **American Industrial Hygienists Conference and Exposition (AIHce)**
Presented by the American Industrial Hygiene Association (AIHA) and the American Conference of Governmental Industrial Hygienists (ACGIH) at the Minneapolis Convention Center. AIHce offers general sessions, lectures, technical sessions lunch sessions, professional development courses and the opportunity to earn up to 6.5 certification maintenance points, as well as an expo featuring more than 300 exhibitors. For more information see: <http://www.aiha.org/aihce08/>
- June 2 – 6** 2008 World Safety Conference and Exposition, National Fire Protection Association, Las Vegas;
For more information see: <http://www.nfpa.org/wsce>

Help Plan the 2008 BAESG Professional Development Conference

This year marks our Sixth Annual Professional Development Conference. Michael Hall, Director of the Environmental Training Center at Mission College will be directing the planning efforts for 2008. The meetings will be held on the 4th Thursday of the month from 6:00 PM - 8:00 PM at Mission College. Food and soft drinks will be served. For more information or to get involved, contact Michael at: **Mike_Hall@wvm.edu**.



Employment Opportunities

The following positions were collected from a variety of internet job listings and/or postings received directly by the BAESG Jobs Coordinator. BAESG has not verified the informational content of all of these ads.

This newsletter only publishes partial descriptions in the interest of saving space. For more detailed information, phone or email the listed contact. BAESG members who subscribe to the Jobs Announcements Distribution List also receive full descriptions by email. To subscribe, send your request to baesg.jobs@gmail.com.

CHEMICAL SAFETY ENGINEER : Perform health and safety assignments using safety concepts and principles to anticipate, identify, evaluate, and mitigate safety and health hazards for manufacturing, laboratory, and maintenance work areas and activities. Maintain safety-related recordkeeping consistent with OSHA requirements. Promote safety culture and assist with achieving established goals. Provide guidance to facilities, engineering, operations, and maintenance personnel to ensure compliance with OSHA's PSM regulation. Coordinate with regulatory agencies, emergency responders, risk insurers, internal customers on safety issues. Provide backup for other function within EH&S, especially Industrial Hygiene.

Ampac Fine Chemicals has regular full time opportunities available at our Rancho Cordova site. Additional information about our Rancho Cordova facility can be obtained by visiting our website @ www.ampacfinechemicals.com.

For Consideration for this position please send resumes to katherine.malberg@apfc.com or call HR @ 916-357-6282.

INDUSTRIAL HYGIENIST Under general direction, performs industrial hygiene assignments requiring a wide application of advanced principles, theories and concepts in the field plus a working knowledge of other related disciplines.

Ampac Fine Chemicals has regular full time opportunities available at our Rancho Cordova site. Additional information about our Rancho Cordova facility can be obtained by visiting our website @ www.ampacfinechemicals.com.

For Consideration for this position please send resumes to katherine.malberg@apfc.com or call HR @ 916-357-6282.

ERT COORDINATOR Lam Research, Fremont, California, 94538

Job Description The EHS Engineer ensures that EHS regulatory compliance is implemented and enforced at LAM. The EHS Engineer may work with internal customers to prevent and reduce hazardous materials and safety incidents from occurring. The EHS Engineer ensures EHS regulatory compliance for various assigned tasks. To apply for this job, email your resume to katie.slack@lamrc.com

Environmental, Health and Safety Engineer
Finisar Corporation, Fremont, California, 94538,

Develop, implement, and maintain safety, health and environmental programs to manage risk, improve performance, and ensure regulatory compliance.

Lead and coordinate EH&S efforts at Finisar’s California facilities:

Contact Person: Sheila Roberts: email: sheila.roberts@finisar.com; Phone: 510 979-3099
Fax: 510 226-6650

West Coast Director Health, Environment, and Safety,
Bayer HealthCare, Pharmaceuticals Division
Berekely, California

Coordinate the Health, Environment, and Safety functions on a global basis for the Product Supply BioTeck (PS-B) to provide a safe and healthy workplace and protect the environment, community, and public in accordance with regulatory and corporate requirements. Minimize the impact of company operations on the environment; ensure policies and practices are in place for effective crisis management.

To apply: Please contact amber.welch@bayer.com.

Environmental Engineer (Refinery) -

Position includes the following major duties:

Wastewater Programs, Stormwater, SARA 313, TRI, TSCA, SPCC, SWPPP, Air Emissions Report (AER), and Greenhouse Gas Program.

Manages the environmental review of the MSDS system and tracks all South Coast Air Quality Management District Rule 219 exemptions.

Responsible for leading all stormwater/wastewater inspections/audits by external agencies such as EPA or LACSD.

ALL INTERESTED AND QUALIFIED PARTIES SHOULD SEND THEIR RESUME AND COVER LETTERS TO jimi@wtsnetworking.com

Manager, Environmental Health & Safety
XOMA (US) LLC
2910 Seventh Street
Berkeley, CA 94710

SUMMARY:

Responsible for XOMA’s Environmental Health and Safety programs. Maintains compliance with all Federal, State, and Local regulations and coordinates any inspections from outside agencies.

Contact:

Kelley Stevens, On-Site Senior Recruiter
510-204-7298 Direct / 510-644-0471 Fax / stevens@xoma.com

Environmental Health & Safety Manager – Construction Industry – Sonoma County

Summary

Plans, directs, and implements organization safety program to ensure safe, healthy, and accident-free work environment by performing the following duties personally or through subordinate supervisors.

Supervisory Responsibilities

Directly supervises one Safety Specialist. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

Qualifications

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Interested Parties: SEND MICROSOFT WORD VERSION OF RESUME TO:

Michael Williams, CIH, CSP, ARM – HSRMS;
mikewehs@aol.com; 408-209-2307; Fax: 707-473-0579

Environmental Health and Safety Consultant

The Cohen Group, one of the oldest occupational health and safety consulting firms in the San Francisco Bay Area has an opening for a full-time, entry-level environmental health and safety consultant. The individual will work under the direction of certified industrial hygienists. The position requires the performance of general industrial hygiene duties, including conducting field sampling surveys, calibrating sampling and measuring apparatus, assisting in the investigation of work conditions, and developing recommendations for corrective action; reviewing and summarizing deposition transcripts and other documents involved in litigation support; providing training and instruction in such areas as fit testing for respiratory protection; and assisting in the collection of data and preparation of reports. Some travel is required.

The ideal candidate will have a bachelor's degree in a related-science, a graduate degree in environmental health or industrial hygiene, and will have at least one year of experience in a health and safety position.

There is some flexibility in daily work hours, as well as the ability to telecommute. We offer an excellent benefits package and salary commensurate with experience.

Please forward your cover letter, resume, and salary requirements by email to:

Joel Cohen, MPH, CIH
The Cohen Group
3 Waters Park Drive, Suite 226
San Mateo, CA 94403
(650) 349-9737
jcohen@thecohengroup.com

BAESG MEMBERSHIP APPLICATION

for both new and renewing members

Annual membership dues are \$25.00. (\$12.50 for full-time students and retired EH&S professionals).
Make your check payable to BAESG and return with this application to:

Membership Director
Bay Area Environmental Safety Group
P. O. Box 60363
Sunnyvale, CA 94088-0363

Personal Information and Company Address (to be listed in the Membership Directory)

Name: _____

Full-time Student? Yes ___ No ___

Certifications (such as CIH, CSP) _____

Job Title (or field of study): _____

Company (or College/University): _____

Address: _____

City, State, and ZIP CODE: _____

Daytime Phone (with area code): _____ FAX: _____

Email address: _____

Sponsor: _____

Monthly newsletters will be sent to the above email address.

Areas of Interest:

Please indicate any areas of special interest that you would like to see covered during the monthly meetings, or topics that you would be interested in presenting.

TOPIC: _____

PRESENTING? Yes ___ No ___

Please check here if you would like to be placed on the Jobs eMail Distribution List to receive Updates of job listings between the monthly publication of the newsletter.

Email address to which listings should be sent: _____