

# AMERICAN SOCIETY OF SAFETY ENGINEERS



## ASSE Kids

### ***“Safety-on-the-Job” Poster Entries***

*This is the 3<sup>rd</sup> Annual “Safety-on-the-Job” poster contest open to children ages 5-12. The deadline is Valentine’s Day, February 14th.*

*All ASSE members’ kids, grandkids, nieces and nephews are eligible.*

*Everyone is a winner and receives a prize. The first place winners receive a \$1000 Savings Bond and their names go on the NAOSH Kids “Safety-on-the-Job” poster contest plaque at ASSE. And this year, there is a good chance that the first place winners will be honored at the U.S. Department of Labor in Washington, DC NAOSH Week 05, probably May 5<sup>th</sup>.*

*For more information contact Diane Hurns at [dhurns@asse.org](mailto:dhurns@asse.org). She will send you everything you need.*

## Next Meeting



**Date: Tuesday, February 15<sup>th</sup>, 2005**

**Place: North Towne Seafood and Grill  
2093 Eagle Landing Blvd.  
North Charleston, SC  
Phone: (843) 863-1001**

**Time: 11:30 am**

**Guest Speaker: Lt. Paul Brouthers  
SC Highway Patrol**

**Lt. Brouthers will speak on the South Carolina initiative to reduce fatalities in South Carolina and in particular, the greater Charleston area.**

**Lunch is promptly at Noon and please bring a guest.**

**Remember the Get-A-Member Contest there’s a Plasma TV with someone’s name on it and **we have from now until March 31<sup>st</sup> to compete** for the cash prizes too. Be sure to put your name as “Sponsor” on all applications of the new members that you recruit.**



# AMERICAN SOCIETY OF SAFETY ENGINEERS LOW COUNTRY CHAPTER

Presentation of the

## ***25 Year Membership Award*** to ***Mr. John A. Anderson***

The Award was presented by Mr. Joel Rogers, President, ASSE Low Country Chapter at the January 2005 meeting. Mr. Anderson was eligible to receive the Award in November 2004; however, due to his company-wide safety schedule and responsibility he has not always been in town for our meeting days. We were happy he was with us in January.

### **March's Meeting**

**March 15<sup>th</sup>, 2005**

### **Cooper River Bridge Tour**

**A Tour and a Lunch.**

**Please RSVP by February 18<sup>th</sup>**

**Thank you for your timely response.**  
[mtroescher@tidewaterskanska.com](mailto:mtroescher@tidewaterskanska.com)  
843-297-1424

**Details will be sent as soon as we get a head count.**

### **Treasurer's Corner**

As of January 31<sup>st</sup>, 2005, the Chapter's account continues to operate with a balance of \$7,700.71. There were 21 members and guests present at the January 18, 2005 meeting.

**Michele**

### **FUTURE ASSE ROC MEETINGS**

**March 16-18, 2005**  
**Greater Tidewater Chapter**  
**Virginia Beach, VA**

**July 26-28, 2005**  
**Tarheel Chapter (Officer Training)**  
**Charlotte, NC**

**November 16-18, 2005**  
**SC Low Country Chapter**  
**Charleston, SC**

## *ASSE Low Country Chapter Member receives Certification*

### **Executive Program**

A certificate from ASSE's Executive Program in Safety Management illustrates a practitioner's commitment to professional development. **The program is designed to help SH&E professionals demonstrate safety system success and gain a career advantage.** Participants receive the certificate after earning a total of 7.5 CEUs for completing three required seminars (4.9 CEUs) and additional ASSE national seminars or symposia (at least 2.6 CEUs). **A recent recipient of the executive certificate is:**

**William C. Parker**, General Manager, Safety and Regulatory Affairs, APM Terminals, Mt. Pleasant, SC

**Did You Know** that oxygen deficiency is the most significant and most common atmospheric hazard found in a confined space. It occurs naturally, either by consumption or displacement due to fire, corrosion, replacement by inert gases, paint drying or organic decay and **our senses are of no use in evaluating the problem because its effects are swift and irreversible.** The maximum safe level for oxygen concentration is 22 percent and the minimum is 19.5 percent. Death can occur in 4 to 6 minutes when the oxygen concentration falls. Knowledge is Power, Knowledge Saves Lives – Share your Knowledge.

**\*\* 2004-2005 Survey Results \*\*  
on pages 7 & 8**

## **The 2004-2005 Member-Get-A-Member Challenge**

### **Prizes**

#### **\* Individual Prizes**

**1<sup>st</sup> Place: \$1,000**

**2<sup>nd</sup> Place: \$500**

**3<sup>rd</sup> Place: \$250**

**\* Region Prize: \$1,000**

**\* Chapter Prize: \$500**

**\* Plasma Television – everyone that recruits at least one new member will be entered into a drawing to win a plasma television**

*(ASSE reserves the right to substitute prizes of equal value)*

**The Challenge runs from**

**April 1, 2004 – March 31, 2005**

**The winners will be announced in  
May 2005**

**To get started:**

**Call ASSE Customer Service at  
847-699-2929 for a supply of  
applications; or**

**Download an Application from  
our website; or**

**Email your colleagues directly  
through our refer a friend email  
tool**

## Portable Versus Fixed Gas Detectors: Which One Do You Need?

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By: Alan K. Austin

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Every year workers are injured needlessly in plant accidents caused by leaking toxic or combustible gases. Such accidents involve a wide range of hazardous gases, including Ammonia, Carbon Monoxide, Chlorine, Hydrogen Sulfide, Hydrocarbon Vapors and more. Most of these accidents are preventable with personal safety or plant gas monitoring equipment. The question is when should you protect your people and equipment with portable or fixed gas detectors?

### Understanding The Differences

Fixed-point and/or portable gas detectors are essential to protect workers and equipment, as well as an OSHA and EPA requirement. A fixed system typically consists of one or more electrochemical cell (EC), metal oxide semiconductor (MOS), catalytic-bead (CB), or infrared (IR) sensors placed in key locations. When toxic or combustible gas is present outside of acceptable limits (an alarm), gas exposure data are communicated via hard wiring to a control station.

Portable detectors rely on EC cells, and they are utilized in confined spaces or large areas where fixed systems are impractical or cost-prohibitive. In confined spaces, the access is often infrequent and the danger maybe more from oxygen deficiency than from a combustible gas requiring continuous fixed monitoring. When portable detectors sense a toxic or combustible gas, they immediately warn the technician through visual, audio and vibrating alarms.

### Workplace Safety Planning

When planning a toxic or combustible gas safety program, there are many important factors to consider. No matter whether you need a portable or a fixed gas detector, some

of the important factors are:

? Walk the plant, check potential leak sources, think over placement of fixed detectors and identify confined space permit hazard areas for portable detectors.

? Review the plant's ambient operating environment (watch for temperature and humidity extremes)

? Consider the various portable and fixed detector sensing technologies for performance and reliability

? For portable detectors, think about ease-of-use, training, battery life and service life

? For fixed detectors, look at ease of installation, calibration and maintenance

? Evaluate the detector's maintenance and repair needs

Protecting chemical plants against combustible gas vapors, for example, is often best achieved with catalytic bead gas-sensing technology using fixed gas detectors placed throughout the facility. You could give every employee a portable gas detector, but how would you guarantee they would always wear and maintain their monitors in good working order?

On the other hand in confined spaces, the technology of choice is electrochemical sensors in portable gas detector. Tanks need to be cleaned, pumps require maintenance and oxygen deficiency can be deadly in such environments. Placing fixed gas detectors inside tanks, though, is both impractical and too costly given their infrequent access by technicians. The best answer in this case is a portable detector.

### Conclusion

No single detector provides the sensitivity and response time required for every combustible or toxic gas hazard in all plant environments. Start by identifying the gas hazards, and then consider the available gas detection sensing technologies and types of detectors (portable versus fixed). Last, analyze factors such as ease of use, maintenance and cost.

## Reproductive Health Study

NIOSH conducted several studies on pregnancy outcomes among female workers as well as biomarker studies of female hormones.

**The Nurses Health Study :** Over 2.5 million registered nurses who were employed in the USA. 95% of these registered nurses were female included in this study. Harvard University has partnered with NIOSH to conduct a study looking at the impact that shift work and physical demands have on the reproductive health, especially spontaneous abortion, pre-term delivery and infant birth weight. This data is currently being analyzed.

**Exposure to Jet Fuel Study:** NIOSH and the University of Cincinnati and the Department of Defense; This study revealed that higher aliphatic hydrocarbon exposures were associated with 33% reduction in preovulatory luteinizing hormone among women who worked at several US Air Force bases. This study was not designed to explore the effects on birth rates but previous studies (done by NIOSH and the National Institute of Environmental Health Sciences) suggests that compounds found in fuels and some additives may act as endocrine disrupters thus reducing this preovulatory luteinizing hormone which is associated with reduced fertility in women. The authors of this study recommend that additional studies explore the effects of exposure, including potential effects on the ability to conceive.

**Nickel Exposure in Russian Refineries:** NIOSH in collaboration with McMaster University in Canada, Kola Research Laboratory of Occupational Health in Russia and Tromso Univeristy in Norway has assessed the reproductive toxicity of nickel at the Severonickel refinery in Monchegorsk, Russia. The preliminary findings were increases in rates of miscarriage and infertility in workers with high occupational nickel exposure. Semen analysis and serum endocrine analysis will be available soon. These results will address the occupational health concern of Russian workers and will provide a better understanding of the potential effects of occupational nickel exposure in the U.S.

**The Flight Crew Research Program:** included over 172,000 flight personnel working in commercial aircraft cabin with potential exposure to several hazards. The research showed that air crews were exposed to more radiation than most radiation workers in the US. Flight attendants were more likely to have disrupted sleep than comparison populations. Respiratory illnesses were more prevalent in flight attendants than other working women. Additional studies are examining the implications of these findings on pregnancy outcomes, fertility, cancer, physical demand and overall mortality rate.

For more information on this study go to:

<http://www.cdc.gov/niosh/bodyclock.html>

**OSHA Trade Release**  
**February 11, 2005**  
**Contact: Frank Meilinger**  
**Phone: (202) 693-1999**

## OSHA Offers Pocket Card for Excavation and Trenching

**WASHINGTON** -- A new OSHA safety information pocket card, [Safety in Excavations or Trenches](#), will help workers and employers understand safe trenching practices and the federal requirements for construction excavation safety. The cards are printed in English on one side and Spanish on the other.

"This new card provides practical, yet critically important, information that can help save lives," said Acting Assistant Secretary of Labor for OSHA Jonathan L. Snare. "We know that construction excavation can be dangerous work and that's why it important that we make every effort to provide these workers the tools they need to stay safe on the job."

The new pocket-sized card explains that excavations or trenches five feet deep or greater require a protective system. It also highlights OSHA's requirements that excavation or trench walls must meet at least one of the following criteria:

- Sloped for stability
- Cut to create stepped or benched grades
- Supported by a system made with posts, beams, shores or planking and hydraulic jacks
- Supported by a trench box
- An exit ladder must be within 25 feet of workers

Excavating is recognized as one of the most hazardous construction operations. OSHA recently revised construction excavation standards to make them easier to understand, permit the use of performance criteria where possible, and provide construction employers with options when classifying soil and selecting employee protection methods.

## **Member Directory & Job Line**

Jane Lyons will continue to update the member directory as needed. If you have not sent her your updated information, please email her at:

[Jane.Lyons@us.bosch.com](mailto:Jane.Lyons@us.bosch.com)

Jane also maintains a Job Line by email notification. Please email her if you would like to be on the distribution.

If you are a member of ASSE, you may want to update your information at:

[www.asse.org/format\\_frames\\_main.asp?bannerframe2=professional\\_safety\\_banner.html&mainframe2=contact2.htm](http://www.asse.org/format_frames_main.asp?bannerframe2=professional_safety_banner.html&mainframe2=contact2.htm)

## **Always Looking for a Meeting Host**

Would you consider being a host for a monthly ASSE meeting? Perhaps you know someone who would enjoy our company and great lunch – what better way to present what they represent. When one hosts a meeting, we request that you provide a door prize for a drawing and/or supply the attendees with a company promo such as pens, hats, or other items with your logo.

In exchange for hosting a meeting, there will be a space for free advertisement provided to you at no charge in that month's newsletter. Just let us know when you would like to host a meeting.

## **Officers**

### **President**

Joel E. Rogers, CSP  
MeadWestvaco – Environmental Services  
843-745-3140  
[Jer15@meadwestvaco.com](mailto:Jer15@meadwestvaco.com)

### **President Elect**

Janice Woods, ASP, RN-COHN  
Robert Bosch Corp.  
843-760-7364

[Janice.woods@us.bosch.com](mailto:Janice.woods@us.bosch.com)

### **Second Vice President/Programs**

Jane Lyons, CSP  
Robert Bosch Corp.  
843-760-8367  
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### **Secretary**

Dana Fisher  
AGFA  
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### **Treasurer**

Michele McCutchen  
James Island Public Service District  
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### **Newsletter**

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### **Membership**

Jane Lyons, CSP  
Robert Bosch Corp.  
843-760-8367  
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### **Government Affairs**

Linda Rackley, CIH  
843-559-4368  
[wraithlee@worldnet.att.net](mailto:wraithlee@worldnet.att.net)

### **Regulatory Affairs**

Wayne Hardwicke, CSP  
Environ. Enterprises Group  
843-881-9256  
[hardwicke@comcast.net](mailto:hardwicke@comcast.net)

### **Web-site**

Checkout this safety web site:  
<http://www.emeetingplace.com>



**American Society of Safety Engineers**  
The oldest National Safety Organization in the United States – Founded in 1911

The 2004-2005 survey is listed below. Looks like Work comp; OSHA updates; Ergo; Behavior Based Safety; Return to Work programs; Accident Investigation; and Job Hazard Analysis are the hot topics. You can read the results yourself....

And, the Bridge is the winner for the next place to tour!

Good, we have it scheduled for March!!

Overall, it looks like we are doing a good job and meeting the Chapter's needs!

Jane Lyons

## 2004-2005 ASSE Low Country Chapter Membership Survey

### RESULTS – 26 Respondents (22% of the Chapter)

Which of the following topics would interest you enough to attend a meeting?  
(top 19 TOPICS in **BOLD**)

No of Respondents	Topic
<b>15</b>	<b>Workers Compensation</b>
<b>15</b>	<b>OSHA Updates</b>
<b>12</b>	<b>Ergonomics</b>
<b>12</b>	<b>Behavioral Based Safety</b>
<b>12</b>	<b>Return to Work Programs</b>
<b>11</b>	<b>Accident Investigation</b>
<b>10</b>	<b>Job Hazard Analysis</b>
<b>9</b>	<b>Legal Issues</b>
<b>9</b>	<b>Root Cause Analysis</b>
<b>9</b>	<b>Industrial Hygiene</b>
<b>8</b>	<b>Construction Safety</b>
<b>8</b>	<b>Confined Space</b>
<b>8</b>	<b>Medical Surveillance</b>
<b>8</b>	<b>Safety Committee</b>
<b>8</b>	<b>Homeland Security</b>
<b>8</b>	<b>Emergency Response Teams</b>
<b>7</b>	<b>Indoor Air Quality</b>
<b>7</b>	<b>ISO 14001</b>
<b>7</b>	<b>ISO 18000</b>
6	Hearing Conservation
6	Cranes, derricks, hoists
6	Disaster Planning
6	Lockout/Tagout
6	CPR & AED training
6	Case Management

6	Safety Best Practices
6	EPA/DHEC
6	Contractor Safety
6	Auditing
6	Workplace Violence
6	Risk Assessment
5	Waste Management
5	Respirator Program
5	Bloodborne Pathogen
5	Fire Protection
5	Hazardous Chemicals
5	Toxicology
5	Fall Protection
4	OSHA 300 Log
4	First Aid
4	Light Duty Programs
4	Communication Skills
4	FMLA & ADA
3	SARA
3	Accountability
3	PPE
3	Forklift Training program
3	Computer based training
3	Post Crisis Management
2	Management Support
2	MSDS
2	Machine Guarding

Please list any other topics you are interested in or speakers you would recommend

- Longshore & Harbor Workers Act
- Workers' Comp Attorney for the Defendant
- Trenching and Shoring
- Tom Harvey, Allied Safety Associates
- Progressive Corporate Safety Goals other than AFR

Which facilities in the local area would you be interested in touring?

No of Respondents	Location to Tour
5	New Cooper River Bridge
2	Bosch
2	Alcoa
2	American La France
2	Rhodia
2	BP Amoco
2	Nucor
2	Allied Chemical

2	MeadWestvaco
1	SC Port Authority
1	Linde Trucks
1	Jacobs
1	Giant Cement
1	Hess
1	Mikasa

What ONE THING would make the Chapter Meetings better?

More attendees

- Every 10<sup>th</sup> lunch in a row FREE
- I can't think of anything. Y'all do a great job!
- Let members discuss what works and doesn't work in their own situations
- Occasional evening meetings
- Occasional change of venue
- The subject matter and the presentation skills of the presenters

- None-keep up the good work on sending the monthly newsletter via the Internet
- I wish I had more to comment or suggest, but I think we have good meeting and a good size group. Maybe if we could see more facilities it could be helpful to see what other (companies) have in place for safety (i.e. Programs, incentive, policies).
- Nice job!

What would make you attend MORE of the Chapter Meetings?

- Evening maybe?
- Availability of time away from work
- My schedule
- My schedule, you can't help me with that
- I attend them all now and enjoy them very much
- Traveling less

Comments & Suggestions

- Maybe we'd get better attendance with a Friday lunch meeting
- Maybe we'd get better attendance with a Friday lunch meeting
- Personally, I do not like to attend evening meetings
- You guys are going an outstanding job with the Chapter