

Together With



Spring 2012

A PUBLICATION OF THE TENNESSEE DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT

Safety Violations Identified at the Texas City Disaster II

"There were three key pieces of instrumentation that were actually supposed to be repaired that were not repaired. And the management knew this," said a member of the U.S. Chemical Safety Board after an explosion at a BP oil refinery in Texas City, Texas, just outside Galveston on March 23, 2005. In the last edition of this newsletter, the first Texas City disaster, which occurred in 1947, was discussed. In 2005, the town was rocked a second time by a deadly explosion.

In 2005, the BP refinery in Texas City was the second largest refinery in the state and the third largest in the nation. On the ill-fated day, BP employees and contract workers began an especially dangerous procedure: re-starting a unit that had been down for repairs. They began to fill a tower with gasoline. The tower overflowed, and the excess gas flowed into a back-up unit, which then also overflowed and sent a geyser of gasoline into the air. The plume of gas had formed a massive vapor cloud on the ground, and an idling truck likely had ignited them. The blast pulverized several nearby office trailers full of workers.

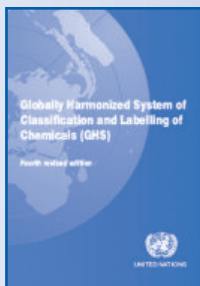
Fifteen workers were killed, and 170 more were injured. In the aftermath of the explosion, BP blamed the disaster mostly on operator error and fired six employees; however, an investigation by CBS found that BP had failed to heed or implement at least nine safety recommendations made before the blast. OSHA ultimately found more than 300 safety violations and fined BP \$21 million—the largest fine in OSHA history at the time. On October 30, 2009, OSHA imposed an \$87 million fine on the company for failing to correct safety hazards revealed in the 2005 explosion. In its report, OSHA also cited more than 700 safety violations.



story references on page 2

Steve Hawkins Appointed TOSHA Administrator

On April 18, 2012, Department of Labor and Workforce Development Commissioner Karla Davis announced the appointment of Steve Hawkins as the TOSHA Administrator. Steve has been with the department for over 25 years, starting as an Occupational Safety Specialist in 1986 and rising through the ranks to become Assistant Administrator in 2000. Commissioner Davis said, " Steve's dedication to ensuring the health and safety of working Tennesseans is immeasurable." Please join TOSHA in congratulating Steve on this promotion!



Global Harmonization Is Final, Finally!

On March 26, 2012, the final rule was published in the Federal Register. The effective date is 60 days after the publication date. TOSHA's effective dates should be the same. With this act, the

Hazard Communication Standard (HCS) is now aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). OSHA has modified the Hazard Communication Standard (HCS) to adopt the GHS to improve safety and health of workers through more effective communications on chemical hazards.

(continued on page 3)



TENNESSEE SAFETY &
HEALTH CONGRESS

Don't Forget!

**The Tennessee Safety
and Health Congress**
July 23-25, 2012
Opryland Hotel and
Convention Center
www.tnsafetycongress.org

2

Participate in the **Electrical Accident Prevention Stand Down**

Monday, June 11th at 7:00am on construction sites across Tennessee.
Contact Kim Enoch at (865) 525-2166 to find out how you can create a buzz in your company.

The following are some of the sponsors who have signed on:

Associated Builders and Contractors	Plumbing-Heating-Cooling Contractors
Associated General Contractors	Tennessee Road Builders Association
American Society of Safety Engineers	Home Builders Association of TN
Tennessee Occupational Safety and Health Administration	



Karla Davis, Commissioner

Steve Hawkins, Administrator

220 French Landing Drive
Nashville, TN 37243

(615)741-2793
FAX (615)741-3325

Accident Reporting
1-800-249-8510
TDD 1-800-475-1351

www.tn.gov/labor-wfd

Inquiries regarding
Together With TOSHA
should be directed to the
TOSHA Division
Training Section:
(615)741-5726



Together with TOSHA is a quarterly publication of the Tennessee Department of Labor and Workforce Development; July 2010; Auth. No. 337352; 18,000 copies; \$0.76 per copy. The Tennessee Department of Labor and Workforce Development is committed to principles of equal opportunity, equal access, and affirmative action. Auxiliary aids and services are available upon request to individuals with disabilities.

Fall Protection 101

By Bradley Stallard, TOSHA Occupational Safety Specialist

The US Department of Labor, Bureau of Labor Statistics reports that 14 percent of the work-related fatalities in the year 2010 were due to falls. The four most frequent work-related fatal events in the U.S. in 2009-2010 were transportation incidents, contact with objects or equipment, assaults and violent acts, and falls, making falls the fourth leading cause of work-related deaths in the United States. The Tennessee Department of Labor also reports that 11.4 percent of work-related



fatalities in Tennessee are due to falls. Falls are the number one construction hazard, followed by highway incidents struck by or caught between an object. With the fall-related incidents at the work place ever looming, employers—particularly those in the construction industry—should take extra care to ensure that their worksites meet the provisions of OSHA's fall protection standard.

There are also the financial considerations for employers, insurance companies, and industry in general. The 2011 Liberty Mutual Workplace Safety Index reports that the overall real (inflation-adjusted) direct costs of disabling workplace injuries decreased 4.6 percent between 1998 and 2009; however, fall-on-same-level injuries increased by 34.2 percent and fall-to-lower-level injuries increased 10.2 percent, respectively. The cost of fall-on-same-level injuries was \$7.9 billion or 15.8 percent of the total cost of \$44.7 billion for the year of 2009. The cost of fall-to-lower-level injuries was \$5.35 billion or 10.7 percent of the total cost of \$44.7 billion for the year of 2009. The total cost of the two fall categories was \$13.25 billion or 25.5 percent of the total \$44.7 billion for the year of 2009.



References for the Texas City Disaster II:

1. CBS, 60 Minutes, http://www.cbsnews.com/2100-18560_162-2126509.html, "The Explosion at Texas City" by Daniel Shorn
2. Texas City Refinery Explosion, Wikipedia
3. U.S. Refineries Operable Capacity, Department of Energy, Energy Information Administration, July 2008
4. Lyall, Sarah, In BP's Record, A History of Boldness and Costly Blunders, New York Times, 2010-07-13
5. CSB, Chemical Safety Board, BP America Refinery Explosion, www.cbs.gov

Global Harmonization Is Final, Finally!

(continued from page one)



What are the major changes to the Hazard Communication Standard? The three major areas of change are in hazard classification, labels, and safety data sheets.

Hazard classification: The definitions of hazard have been changed to provide specific criteria for classification of health and physical hazards, as well as classification of mixtures. These specific criteria will help to ensure that evaluations of hazardous effects are consistent across manufacturers, and that labels and safety data sheets are more accurate as a result.

- Labels: Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- Safety Data Sheets now have a specified 16-section format.
- Information and training: Employers are required to train workers by December 1, 2013, on the new label elements and safety data sheet format.



By June 15, 2015, chemical manufacturers, importers, distributors and employers shall be in compliance with all modified provisions of this final rule, except that distributors have until December 21, 2015, to ensure that they do not ship containers labeled by the chemical manufacturer or importer unless it has a GHS label. By June 1, 2016, employers must update alternative workplace labeling and hazard communication program as necessary and provide additional employee training for newly identified physical or health hazards. During the transition period, compliance with the existing standard or the revised standard is acceptable. For more information visit www.osha.gov.

TOSHA TIPS



Condition: Sharps Injury Protection Devices Evaluated and In Use Not Documented in the Exposure Control Plan

Potential Effects: Cuts, sticks, and other puncture wounds to employees handling sharp devices due to use of an outdated device whose design has been improved. Also, possible use of an improperly guarded device because of lack of knowledge of the appropriate device to be used.

Standard: TDLWD Rule 0800-1-10-.04(2)

Recommended Action: Evaluate available engineered sharps injury protection devices and place in use the device that is most effective in preventing exposure incidents from needles, scalpels, and other sharp objects that are contaminated with another person's blood or body fluid. Do not maintain an available supply of other devices without sharps injury protection—discard those devices. Obtain input on the choice of the most appropriate device from employees who will use the device. Once a device is chosen and placed in use, document its use in your Exposure Control Plan.

This requirement is found in Tennessee's Sharps Injury Prevention Law as cited above. The rule is short but employers must comply with the requirements of the law in addition to the requirements of the Bloodborne Pathogens standard found at 29CFR 1910.1030. The Tennessee Law can be found and read at <http://www.tn.gov/sos/rules/0800/0800-01/0800-01.htm>.

L EARN & LIVE

Public Sector Files

A 49-year-old contract worker died when he entered a chemical storage tank at a chemical tank farm to clean and inspect the tank. Before arriving on site, the victim received e-mails from the chemical company outlining the projects to be completed. On his first day on site, the victim was verbally trained by the plant manager, after which the two of them went to lunch, and then the victim left the site. The following day the victim signed in on-site at 8:00 a.m. A material handler for the chemical company worked around the tank adjacent to the victim and spoke with him twice that morning. He saw the victim last in mid-morning walking from his rental car back toward the tank he was working on. After lunch the material handler looked for the victim, but could not find him. In mid-afternoon, a warehouse leadman asked if anyone had seen the victim, and no one had. He then went to check the tanks and found the victim collapsed inside one of the tanks. EMS was called, but the victim had succumbed to what the medical examiner reported as "acute heptane and toluene toxicity."



To Prevent Such an Incident the Employer Must

1. Provide and ensure that employees properly use ventilating equipment, communications equipment, personal protective equipment, and where possible, engineering and work practice controls needed to obtain acceptable entry conditions
2. Provide and ensure that employees properly use rescue and emergency equipment and develop and implement procedures for summoning rescue and emergency services or for rescuing entrants from permit spaces.
3. Provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations.
4. Before entry is authorized, document the completion of measures required to render the space safe for entry by preparing an entry permit.
5. Ensure that the entry permit that documents authorized entry to a permit space identifies the personnel, by name, currently serving as attendants; the hazards of the permit space to be entered; and the communication procedures used by authorized entrants and attendants to maintain contact during entry.
6. Ensure that all authorized entrants properly use ventilation, communication, respiratory protection, and rescue equipment.