

ACTS FACTS

THE MONTHLY NEWSLETTER FROM
ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

January 2010

Vol. 24, No. 01

ACTS wishes you a healthy, happy 2010

BOARD of DIRECTORS: Monona Rossol, Tobi Zausner; Elizabeth Northrop,
Diana Bryan, Susan Shaw, John Fairlie

RESEARCH: Brian C. Lee, Sharon Campbell, Robert Pearl, Ted Rickard, Pamela Dale,
Kathy Hulce; Pat Scheffield; **STAFF:** John S. Fairlie, Sr.

23 YEAR ANNIVERSARY OF ACT FACTS

One more year and it will be a quarter of a century since *ACTS FACTS* put out its first issue. We still appear to be the only publication exclusively covering health, safety and regulatory issues in the arts. Our subscription price enables us to break even on the newsletter's expenses--which is all we ask. We hope you will continue to subscribe and communicate with us. Many of our articles are in response to comments in your calls, e-mails, and the hand written notes on your renewal blanks.

HISTORY REPEATS: NIGHTCLUB FIRE IN RUSSIA KILLS 152

Associated Press, stories from December 5 to 25, 2009

Russian officials say the death toll from a nightclub fire in the Urals city of Perm On December 5th has risen to 152. The regional branch of the Emergency Situations Ministry said that two more women died of their injuries on December 24th and 74 other victims are still hospitalized.

The circumstances of this fire are eerily similar to the 2003 Rhode Island nightclub fire in which 100 people died (*ACTS FACTS*, 3 & 9/03). Just as in Rhode Island, the blaze at the Lane Horse nightclub in Perm broke out when pyrotechnics ignited insulation. Russian clubs and restaurants often cover ceilings with plastic insulation and a layer of willow twigs to create a rustic look, one of many uses of combustible materials in buildings by businessmen who bribe officials to look the other way.

Just as in the Rhode Island fire, a clubgoer recorded a video that was shown on Russian television showing partygoers dancing, before sparks from pyrotechnic fountains on stage ignited the club's ceiling around midnight. The video showed people reluctantly heading toward the exit, some of them turning back to look at the burning ceiling. Within seconds they started rushing away in panic.

There was only one exit from the Russian club. The Rhode Island club had two exits, but patrons didn't know about the other exit that was near the stage and all tried to get out the front door, too.

Just as in the Rhode Island fire, the club managers reportedly had been fined twice in the past for breaking fire safety regulations and did not have a permit to use pyrotechnics indoors. But unlike Rhode Island, Russian authorities arrested the registered co-owner of the club, its managing director and three other suspects including the businessman who was hired to install the pyrotechnics. One other suspect was injured in the fire and remains in critical condition. As far as I can tell from wire services, these five people are still in jail as of January first.

REFORM OF THE MSDS IS COMING

Editorial

It was sad to start the New Year with a story of 152 people dead from the same disregard for fire safety we saw in the Rhode Island nightclub fire. This story was even more depressing to me because I inspected a New York nightclub last week that was full of flaking lead paint, asbestos, and fire hazards. For balance, I needed to cover something more positive. I found it in the changes proposed for material safety data sheets (MSDSs)

You readers and others have made me an MSDS expert. For 25 years, I have offered to interpret and comment on MSDSs you send or attach to an email. So I've read thousands. And most stink.

MSDSs TODAY. The Occupational Safety and Health Administration (OSHA) requires 12 categories of information on MSDS, but many MSDSs don't cover all of them. Finding information is difficult because there is no set format in which the data must be presented. Confusing and contradictory statements, outright errors, and data that is years out of date are common on MSDSs.

Even worse, over the last decade I have seen more and more manufacturers reinterpreting OSHA's regulations to mean they only have to list ingredients as hazardous if they are one of the roughly 400 chemicals for which OSHA has standards. Some manufacturers fell free to simply withhold from us the presence of any chemical for which there was no specific OSHA regulation or air quality standard. Usually they will even tell you they are doing this with statements such as "no regulated ingredients" or "no OSHA standards apply to any components."

Listing only 400 ingredients is outrageous when you realize that the US EPA estimates there are 100,000 chemicals in commerce, the European Union has registered 140,000 chemicals to be used in their products, and the Chemical Abstract Service recently registered its 50 millionth chemical.

MSDSs got to this sad state simply because no person or government agency checks MSDSs for accuracy or completeness. The information on an MSDS is only likely to be scrutinized after an accident, injury or lawsuit. With no enforcement, there is little incentive to create good MSDSs.

CAVALRY COMING. A United Nations program spearheaded by the European Union has come up with the answer to the MSDS problem. In 2003, the United Nations (UN) adopted the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The GHS classification system was worked out to promote common, harmonized criteria for the classification of chemicals and the aid in the development of a worldwide standard for compatible MSDSs. And in the process, they dropped the "MSDS" name and call the new GHS documents just "Safety Data Sheets."

The GHS is being adopted by more and more countries. Our manufacturers better get used to creating GHS compatible Safety Data Sheets if they want to sell products to the rest of the world.

OSHA already sees this coming. On September 30, 2009, OSHA published a proposed rule (74 FR 50279-50549) to up date the Hazard Communication Standard to adopt the GHS classifications of chemicals and the new Safety Data Sheets. These measures would enhance public health and reduce trade barriers by using universal hazard statements, pictograms, and signal words to communicate hazardous information on product labels and safety data sheets. These new Safety Data Sheets are infinitely more usable for workers, consumers and non-technical people.

THE PURPLE BOOK. The rules for the new Safety Data Sheets are all found in a large publication available online from the United Nations in a big book with a purple cover. Its called the *Globally Harmonized System of Classification and Labelling of Chemicals*, 3rd Revised Edition. Just googling “the GHS Purple Book” should score you a copy. It can be downloaded for free in English or any other major language.

In the Purple Book’s Annex [appendix] 4, there is the following advice which sums up the misleading statements about untested chemicals we currently see here in the US and how these statements are no longer acceptable:

A4.3.11.4 General statements such as “Toxic” with no supporting data or “Safe if properly used” are not acceptable as they may be misleading and do not provide a description of health effects. Phrases such as “not applicable”, “not relevant”, or leaving blank spaces in the health effects section can lead to confusion and misunderstanding and should not be used.

For health effects where information is not available, this should be clearly stated. ...

So the new Safety Data Sheets tell us what is *not* known, along with what is known. For example, our old MSDSs often tell us that a substance is not considered a carcinogen by various research and governmental agencies. You would be misled if you assumed this means the substance is not a carcinogen. Instead, it usually means there are no cancer studies for these agencies to evaluate!

While the new Globally Harmonized Safety Data Sheets can’t change the fact that most of the chemicals we use have never been tested, they will tell us unequivocally which tests have been done and which have not. I hope that workers and consumers one day will be motivated to action when they see over and over again from their Safety Data Sheets that even many of the common chemicals they use have never been tested for cancer—or any other chronic hazard.

DEFINITION CHANGES. There is also a vital change in the definition of a health hazard. OSHA requires MSDSs to list ingredients present in amounts of 1.0 percent or more if they pose a “health hazard” to workers. OSHA defines a health hazard as “a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposure employees.”

You don’t have to be a lawyer to see that chemicals for which there are no data whatever are, by OSHA’s definition, not health hazards! But on the new Safety Data Sheets, a series of blanks for the various toxicity tests for untested chemicals will repeatedly contain the statement that there is “no data available.” Finally people will be able to easily identify chemicals that are untested.

The new Safety Data Sheets reflect the European Union’s influenced in two aspects: 1) the adoption of the Precautionary Principle which does not assume untested chemicals are safe (as US regulations do currently), and 2) the strategy of considering suspect, until proven otherwise, all chemicals that are closely related to a known toxic chemical. Common sense appears to be coming at last.

OSHA PROPOSED RULE. The OSHA’s proposal to update the MSDSs closed it’s comment period on December 29. Soon, OSHA will publish some of these comments, the majority of which probably will be complaints about the changes from manufacturers. I worry that manufacturers will obtain the right to give US workers the old MSDSs and will only provide the GHS Safety Data Sheets to their foreign customers.

But while we can hear the cavalry blowing the call to “charge” in the distance, US workers and consumers will still have to contend with the crap that constitutes most US MSDSs today.

ANTHRAX ASSOCIATED WITH ANOTHER DRUM EVENT

Sources: *MedPage Today*, 12/30/09; New Hampshire DHHS Division of Public Health Services, http://www.dhhs.nh.gov/DHHS/PIO/LIBRARY/Press+Release/cdcs_anthraxfindings.htm, 12/29/09; *New York Times*, <http://www.nytimes.com/2009/12/30/us/30anthrax.html>, 12/29/09; & *UnionLeader.com*, <http://tinurl.com/yegfpnc>, 12/29/09; *9&10 News*, <http://www.9and10news.com/category/story/?id=194661> 12/30/09.

On Christmas eve, investigators from the New Hampshire Department of Human Health Services (DHHS) Department of Public Health Services called on Rev. Larry Brickner-Wood, executive director of the United Campus Ministry in Durham. They alerted him to the possible connection between a drum circle event held at his facility on December 4th and the confirmed case of gastrointestinal anthrax in a young woman who attended the event. The Ministry is not part of the University of New Hampshire, but it houses students and runs a variety of campus-based programs. The monthly drum circles involve people playing hand drums and other percussion instruments to build community spirit and promote well-being. The anthrax victim reportedly is not a UNH student.

Anthrax has been found on two of the African drums used at the drum circle event and on an electrical outlet at the Ministry. The building has been closed until further notice under an order from DHHS Commissioner Nicholas Toumpas. Antibiotics and vaccines have been offered to about 80 people, including about 60 who attended the drum circle as well as University students who lived in the building and those who worked there. Samples have been sent to the Centers for Disease Control to determine whether the patient's anthrax strain matches that found on the drums. The F.B.I., consulting with the state, has concluded that the anthrax strain is not the type used in terrorism.

On December 30, the young woman was still reported to be critical. Gastrointestinal anthrax is rare. Some experts think this is the first recorded case in the US. It can occur when spores are swallowed in food, by hand to mouth contact, or by clearing the throat and swallowing contaminated mucus. It is a mystery how she was exposed by ingestion. The young woman did not drum at the event. Instead, she was the first of many who got up and danced. Earlier cases of the more common skin and inhalation anthrax from African drums were reported *ACTS FACTS* (4 & 9/06, 10/07 & 7/08).

Ironically, New Hampshire was also the site of what may be the largest U.S. outbreak of anthrax. From 1941 to 1966, nearly 150 workers at a Manchester textile mill developed inhalation or cutaneous (skin) anthrax. Spores are believed to have entered the mill in raw goat hairs from what is now Pakistan, used in the linings of men's suit jackets. A total of nine people died. The building was eventually razed in 1976. Combustible materials were incinerated at ultrahigh temperatures and other building components were soaked in formaldehyde, buried, and paved over.

ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations. ACTS takes no money from industry or any party having a financial interest in our opinions about art products.

REPRINT TERMS: Free if unedited & with proper credits. ACTS must check edited copy.

CREDIT: Reprinted from *ACTS FACTS*,
Monona Rossol, Editor,
181 Thompson St., #23,
New York, NY 10012 212/777-0062
ACTSNYC@cs.com
www.artsandcraftstheatersafety.org

Copyright: ACTS, January, 2010
ISSN 1070-9274

SUBSCRIPTION FORM

Subscriptions are \$20 US/year. Canada & Mexico add \$3. Other countries add \$6. Only checks payable on a US bank accepted. I enclose \$ _____ (prepaid) for _____ year(s).

Name _____
Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

February 2010

Vol. 24, No. 01

POTASSIUM CHLORATE EXPLOSION INJURES 8 IN HIGH SCHOOL

<http://www.recordonline.com/apps/pbcs.dll/article?AID=/20100119/NEWS/100119664>, by Deborah Medenback, 1/19/2010 & *The Daily Freeman*, 1-19-10.

A chemistry demonstration gone awry resulted in an explosion and HAZMAT teams being dispatched to the Onteora High School in Boiceville, NY, on January 19. School officials said a teacher was demonstrating interactions between potassium chlorate and food items when the reaction occurred. Nearby classes reported hearing a sound like a loud door slam. Less than three grams of potassium chlorate was used, yet the explosion was strong enough to damage classroom windows.

Seven students and the teacher were transported to area hospitals for treatment. The teacher's injuries were described as "significant" and two students were treated for minor cuts and burns. The remaining students were checked for minor injuries. State police said some people in the classroom also suffered temporary hearing loss.

WHAT IS POTASSIUM CHLORATE? This chemical is used in the manufacture of safety matches and explosives. It is reactive with almost any organic chemical. For example, combining liquid (heated) potassium chlorate with food items such as sugar, gummy bears, or a stick of gum, will cause the chemical to decompose and rapidly generate high heat and oxygen gas. Since it creates its own oxygen, it is not even possible to put out the flame or cool the reaction once it starts.

Explosions with this chemical are not unexpected and most chemistry teachers have found safer demonstrations. Yet, if you Google "potassium chlorate," you will see videos of experiments similar to the one in Boiceville, learn that the Unibomber used this chemical, find bomb formulas, and see a sponsored link selling potassium chlorate for \$7/pound! Attention: Homeland Security.

PRINTMAKING SOURCES. An historic printmaking etching solution called Dutch Mordant is made by mixing potassium chlorate and hydrochloric acid. Only a few art departments still use this very fast and hazardous etching mixture. But I often find old bottles of potassium chlorate still stored in printmaking departments. Sometimes the teachers don't even know what it was used for.

COMMENT. If schools followed the Occupational Safety and Health Administration (OSHA) hazard communication standard's requirement for a complete inventory of all chemical products, old products like this would be identified. Once inventoried, it would be more likely that old materials would be found and disposed of properly. This is especially important in the case of potassium chlorate: old bottles of potassium chlorate that been accidentally contaminated with dirt or dust can become shock sensitive. They may even explode if the bottles are shaken.

SMITHSONIAN WORKER'S ASBESTOS CASE FINALLY SETTLED

BNA-OSHR, 40(2), 1/14/10, p. 32-33 & ACTS FACTS, April, 2009

This past December, a settlement with a worker at the Smithsonian Institution's National Air and Space Museum who claims he contracted asbestosis on the job was finally made public.

THE STORY. This remarkable story began when Richard Pullman, a 53-year-old lighting specialist at the Smithsonian's Air and Space Museum (ASM), attended his first asbestos awareness training in March, 2008. At this training, Pullman heard for the first time that the walls he had been cutting into to update lighting effects for 27 years contained asbestos. Within weeks, Pullman gathered internal documents and filed two federal workplace safety complaints. And because he'd been experiencing shortness of breath, he went to see a lung doctor, who diagnosed asbestosis, a lung disease linked to asbestos fibers in the lung.

This should have been all the documentation he needed, but it wasn't. ASM officials acknowledged the presence of asbestos but said their tests showed there was nothing harmful in the air. The US Department of Labor's workers' compensation board denied both of Pullman's complaints.

Next Pullman spent thousands of dollars to hire an environmental engineer, to secretly collect and test samples of the dust behind walls and in false ceilings that accumulated from years of cutting into walls without dust control. The report stated that asbestos had been mishandled over the years and had "likely resulted in exposures to workers and the public."

Again, this should have been enough documentation. Instead, OSHA met with Pullman's supervisor and others at the museum and sent a letter to Pullman saying the problems "had already been addressed by your employer" and that ASM did not violate OSHA standards. But Pullman persisted and in July, 2008, OSHA cited ASM. That's also when Pullman says his relationship with his bosses soured. He was assigned a new supervisor and he contended that he was effectively demoted.

WHISTLEBLOWERS PROTECTED? Pullman thought he'd come under the Whistleblower Protection Act which protects federal workers from retaliation from their employers. However, federal employees seeking to enforce their rights under the Whistleblower Protection Act have prevailed only three times in 207 tries since 1994. Even worse, Smithsonian employees such as Pullman, along with some other types of federal employees, including congressional staff and workers at the Library of Congress, are excluded from the statute's protections!

So Pullman even tried filing a lawsuit under the EPA's Clean Air Act, seeking damages for alleged retribution against him by the Smithsonian. The Clean Air Act protects all employees who are retaliated against for complaining about violations, such as the release of toxins into the ambient air. This was admittedly a stretch, and this lawsuit also came to naught.

LAST RESORT: THE PRESS. Frustrated, Pullman turned to the *Washington Post*. The *Post* published a long investigative report on March 14, 2009. Based on this article, House Administration Committee Chairman Robert A. Brady (D-Pa) held a Congressional Hearing on April 1 to investigate "dangerous workplace conditions" at the Smithsonian. Finally, the Museum and OSHA got serious. Four months later, in July 2009, an administrative law judge approved a settlement that give Pullman \$233,000 and health insurance from his employer. Even then, this settlement was kept under seal by the Department of Labor until this past December.

LESSONS FOR WORKERS. Every worker cannot be as resourceful and determined as Richard Pullman. But there are some lessons all workers with asbestos issues can take from this story.

1. **Be aware that employees cannot sue their employers.** You must file complaints on job-related injuries with workers compensation and other agencies. Only modest settlements can be obtained.

2. **Be prepared for a long battle.** Employers have resources and time on their side.

3. **Keep EVERY scrap of paper, e-mail, and notes on every conversation related to the problem.** Date each, organize them and have copies in more than one location. A little controlled paranoia will serve you well at times like these.

4. **Test workplace hazards to prove your case.** We rarely recommend hiring an asbestos testing firm as Pullman did since it is expensive and not technically legal. But there are times when it is necessary, such as when the employer is likely to destroy the evidence. Three ways to do this are:

a. Hire a qualified expert. It is expensive, but if the expert and lab do not have the proper qualifications, your money was completely wasted. It may be hard to find a qualified expert who will test without the employer's permission.

b. Take samples yourself. Before trying this, call someone who will provide technical advice. ACTS is one source. You will need to find a certified lab in your area that will physically take the sample from you. Next, take samples without stirring up dust, have someone you trust witness the event, and take a picture of the location. Never let the sample out of your actual presence and go immediately to the lab. Sign a chain of custody statement indicating the sample was never out of your control. Even then, be aware that some courts do not accept this evidence.

c. Be a member of a active union. The best course of action is to be a member of a union that has a safety officer who is knowledgeable and willing to act for you. If you have a good collective bargaining agreement, your union safety officers may take samples legally.

5. **The Press is the last resort.** In this case, the article in the *Post* led to a Congressional hearing on April 1, 2009. The hearings may improve conditions for many workers because they led to the introduction of the Whistleblower Protection Enhancement Act (H.R. 1507). The bill was introduced on March 12, 2009 by Rep. Chris Van Hollen (D-Md.). The legislation was cosponsored by Reps. Bruce Braley (D-Iowa), Todd Platts (R-Pa.), Edolphus Towns (D-NY), and Henry Waxman (D-Calif) and was referred to the House Committee on Oversight and Government Reform. A companion bill (S. 372) was introduced in the Senate by Sen Daniel Akaka (D-Hawaii) and reported by the Senate Committee on Homeland Security and Governmental Affairs to the full Senate on July 29. Like all bills lately, they are stuck in committee. Demand they be released and acted on.

The text of H.R. 1507, is available at <http://thomas.loc.gov/cgi-bin/query/z?c11:R.R.1507>.

ANTHRAX DRUM UPDATE: AP wire (see Jan., ACTS FACTS)

The woman who was in critical condition with an extremely rare form of anthrax is improving and is no longer in intensive care, a state health official said on January 6. Tests have shown the woman's anthrax and the anthrax on the drum heads were the same common wild strain. A New Hampshire state health official says authorities spoke to about 50 of the 60 people who attended the drum circle event at the NH Campus Ministry. Most decided to get vaccinated or take antibiotics.

E-CIGARETTES: ARE THEY A FIRE HAZARD?

NFPA Journal, "Cigarette threat 2.0," Fred Durso, Jan/Feb 2010, p. 16

Last August, a fire erupted inside the cargo compartment of a plane that had just landed at Minneapolis-St. Paul International Airport. The most likely culprit was a shipment of 1,000 electronic cigarettes (e-cigs) which are battery-operated devices that look and function like their paper-and-tobacco counterparts. Only minimal damage was reported, but the incident has called into question the safety of these increasingly popular devices

In a presentation on these devices at a National Fire Protection Association conference on e-cigs, Robert Duval, an NFPA regional manager and senior fire investigator, says the cause for concern is the e-cig's power source: the lithium-ion batteries that are found in other rechargeable devices. He noted at least five other incidents in which lithium-ion batteries caused fires similar to the one at the Minneapolis Airport. Last summer, the Air Line Pilots Association called for a ban on bulk shipments of lithium-ion batteries in general.

Since entering the US market in 2007, "e-cigs" have become a \$1 million-plus industry numbering approximately two million consumers, according to the Electronic Cigarette Association (ECA). A few hundred companies worldwide—12 are ECA members—produce the devices. They are powered by a lithium-ion battery. The battery is used to heat a cartridge filled with a solution that may or may not contain nicotine. Heating occurs when air is sucked through the "cigarette." As a result, the fluid in the cartridge (usually propylene glycol) forms a "smoke" or fog similar to those in certain kinds of theatrical fog machines. At the same time, a tiny LED light causes the tip of the cigarette to glow red in a rather convincing effect.

The purpose of all this is that the user can inhale a small amount of the smoke along with any nicotine and/or flavoring chemicals in the cartridge. The nicotine can be delivered without the cancer-causing tobacco smoke. There are cartridges available with varying amounts of nicotine in them. It is likely that some of the decomposition products from the heated glycol are toxic, but these almost certainly are going to be in lower amounts and less toxic than cigarette smoke.

ACTS is collecting information on e-cigs because the nicotine-free variety might be useful to replace real cigarettes in on stage.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, February, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues. Canada & Mexico are \$28/year. Other Countries are \$30/year. Checks must be payable on US banks in US funds. I enclose \$_____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

March 2010

Vol. 24, No. 03

DIANA BRYAN: ARTIST, BOARD MEMBER DIES

Editorial

Diana Bryan, a Board Member and dear friend, died on February 22. Her passing came as a shock to many people because she kept her fight against breast cancer from all but a few close friends and her life partner, Robert Pearl. Her first battle with the disease was 18 years ago and it was not expected to recur. At that time, it became clear she could no longer continue her career as a printmaker because she had become sensitive to many of the chemicals used in her work. She began working, instead, with nothing more than paper and scissors. Her incredible work, many shows and credits can be seen on her website at www.dianabryan.com. Her life was proof that real artists find ways to express themselves no matter how severely their bodies and art materials are limited.

Diana, who was often described as a "force of nature," joined ACTS' Board in 1997. She not only worked fiercely for artists' safety, she was concerned about environmental issues. Recently she asked me to develop and present an opposing opinion on an Industrial Use Plan proposed by her Town Board in Saugerties, New York, where she lived. The plan would have converted 800 acres of farm land containing an important watershed to industrial purposes. She arranged a televised public meeting that was recorded and played repeatedly on local TV. Her opening remarks at that November 10, 2009 public meeting were probably her last public utterance.

I know ACTS must continue its work without Diana, but it will never be the same.

SMITHSONIAN WAREHOUSE COLLAPSES

SOURCE: WBAL TV Baltimore & Feb 10, 2010 & *Washington Post*, Feb 10, 2010

The February *ACTS FACTS* covered a National Air and Space Museum (ASM) worker who won his claim for contracting asbestosis. Now the museum has suffered another set back.

On February 10, the heavy snows in the Maryland area caused the roof of their warehouse to collapse. The storage facility contained 800 pieces of art. They are housed, according to museum spokeswoman Claire Brown, in a large box, similar to a meat locker. In other parts of the building, there are about 1,500 artifacts from various other collections of the museum, including parts of airplanes and spacecraft. "They are all in crates and protective materials on the shelves," said Brown. Brown said that the storage and shelving units inside the building were supporting the structure after the collapse. They went in and determined there was no loss, according to Brown.

The building is just one part of a large storage facility for the Smithsonian. Many of the buildings date back to World War II and the 1950s. All are scheduled to be replaced in the near future. Perhaps the future should be moved up a bit. And Smithsonian workers and conservators might want to ask first if any asbestos or lead paint may have been disturbed by the collapse.

PRO WRESTLER SINGED BY PYROTECHNICS

The Associated Press, Jim Salter, St. Louis, 2/23/10; 3:03 PM

The professional wrestler known as The Undertaker got minor burns on his chest and a scare during a pyrotechnics mishap at the Scottrade Center in St. Louis. The Undertaker, one of the most popular pro wrestlers, often enters the ring as fireballs explode and music blares. On Sunday, February 21, a fireball went off too close to him.

When his jacket caught fire, it wasn't clear if the audience knew The Undertaker was really on fire or if it was part of the act. He quickly threw the jacket off. The wrestler was evaluated by a ringside physician. Reportedly, he suffered a chest injury that looked like a bad sunburn. He was cleared to wrestle and performed for 25 minutes.

The World Wrestling Entertainment company spokesman, Robert Zimmerman, claims to have hired a professional pyrotechnic company but declined to provide their name. WWE is investigating to determine how the mishap occurred. St. Louis fire officials also reportedly are investigating.

COMMENT: Pyrotechnics are being used more and more at sporting events and concerts. I think we can expect more accidents under the pressure to create ever more exciting effects.

PALLETS

SOURCES: all over the Net from Wiki to Wacky

The January, 2010, recall of Johnson & Johnson's Tylenol™ was found to be caused by storing the drug packages on wooden pallets that had been treated with a fungicide called 2,4,6-tribromophenol. This chemical can be degraded by molds to produce 2,4,6-tribromoanisole whose strong, musty odor caused consumers to complain. There is little known about the health effects of 2,4,6-tribromoanisole and it's long-term effects have not been studied. Apparently it caused nausea and other immediate symptoms in some people who ingested the contaminated drugs.

This event led me to do a little research on wooden pallets. As I expected, crafters and recyclers were touting discarded pallets as a free raw material. Some of these well-meaning, misguided people were suggesting pallets be used for firewood and for building sport-related items such as a skateboarding obstacle called a manual pad or barricades for amateur paintball games. Others suggested using pallet wood for small animal cages or fences. And pallet wood has been used in furniture by at least one company according to *Wikipedia* (Note: I modified the current *Wiki* pallet entry).

Some commercial manufacturers of pallets indicate that they use other pesticide treatments on pallets including propiconazole and various pyrethrins. In addition, imported palletized goods are routinely fumigated with highly toxic pesticides such as ethylene oxide and methyl bromide. And harmful materials or chemicals stored or moved on pallets also may spill on the pallet wood and be absorbed.

Items made from pallet wood certainly may be durable and weather resistant due to the chemical treatments. However, close contact with pallet wood or inhalation of dusts from sanding or sawing will expose crafters to the wood's treatment chemicals and chemical spills. Using pallet wood crafts and furniture can contaminate indoor air in the same way that the wood contaminated the Tylenol™. Burning pallet wood would release decomposition products of these chemicals. For these reasons, discarded wooden pallets should not be used for fire wood or crafts.

LOCOWEED STEW FELLS FAMILY

SOURCE: *MMWR*, 59(4), 2-5-10, pp. 102-104

July 9, 2008, six people from one family, ages 38 to 80, were hospitalized after a relative came to their home and found them laughing, confused, complaining of hallucinations, dizziness and thirst. One of the family vomited. The ambulance was called and all six were transported to the hospital. On admission, two of the six patients had become unconscious.

Doctors found it hard to get a medical history when all of the patients were either unconscious or confused. But the unaffected relative reported that pesticides had been sprayed on mint leaves that might have been incorporated into a stew they ate. However, the patient's symptoms were not consistent with organophosphate poisoning.

Public health investigators and a horticulture expert visited the home, located in a suburban Maryland neighborhood. They found left over stew which was green in color with cooked leaves visible in the bottom of the pot. They also discovered plant material in the kitchen trash which was identified by the horticulture expert as jimsonweed. The next day, the preparer of the stew recalled that the stew consisted of potatoes, garlic, onion, tomato, curry powder and leaves from two plants growing in the yard. One plant was confirmed to be mint. The meal preparer did not know what the other plant was, only that it grew wild in the yard.

The patients symptoms fluctuated over their hospitalization. In addition to rapid heart beat, dilated pupils, and altered mental status, two patients experience urinary retention, and one had fluid in one lung. The patents received supportive care including cardiac monitoring and intravenous fluids. Four members of the family were discharged on the third day, one on the forth day, and the last on the fifth hospital day.

COMMENT. Jimsonweed, also known as locoweed, was well-known in the past as a killer of cattle and other grazing animals. Some people also use the seeds as an hallucinogen. However, in this case, there was no intent to use the plant as a drug. There was just the mistaken notion that an unknown plant from the yard should be good for food. We need to be aware that only a relative handful of the billions of plant species on the earth are safe to eat.

UPDATE: DISNEY SETTLES WITH OSHA

SOURCE: *Palm Beach Post*, 2/17/10; *BNA-OSHR*, 40(6), 2-11-10, p 120 & *Orlando Sentinel*, 2/25/10

The story of three deaths at Disney World in a 7 week period last year is almost over (see *ACTS FACTS*, 09/09). Walt Disney World has agreed to pay \$35,200 of the original \$44,000 fine for a serious violation that contributed to the death of 21-year-old Austin Wuennenberg, a monorail worker at the Orlando theme park. Internal documents from the Occupational Safety & Health Administration obtained by the *Orlando Sentinel* indicate that the accident was caused at 2 am in the morning by an "over tasked" electrician in charge of operating the train switches. He was guiding two trains into their bays when he was interrupted by a call from third approaching train. He failed to activate a switch which caused one train to back into the track of the other oncoming train. Wuennenberg's mother, Christine Wuennenberg, has filed a wrongful death lawsuit against Disney.

No fines or citations were given for the deaths of 47-year-old Mark Priest, who died after he fell into a wall during a pirate-theme stage show or for the death of 30-year-old Anislav Varbanov, a performer in the "Indiana Jones Epic Stunt Spectacular" when he landed awkwardly on his neck in a practice tumbling roll.

SMALL LAB FIRE: BIG LESSONS

<http://www.chanel3000.com>, 2/12/10

According to Madison fire authorities, a University of Wisconsin-Madison graduate student burned his right hand after a fire broke out at a laboratory. Firefighters were called to the Medical Sciences Center on February 11 at 11 pm. They found smoke and haze from a dry chemical extinguisher. The student had put out the fire before firefighters arrived.

Investigators said the fire started when chemicals used by the student dropped onto a chair and ignited the upholstery. His hand reportedly was burned when he pushed the chair down the hallway to the stairwell. The student drove himself to the UW Hospital, where he was treated and released.

COMMENT: A major problem underlies this seemingly minor incident. That problem becomes obvious when you ask, "what was an upholstered chair doing in a chemical laboratory?"

Having inspected science, art, and theater departments for 30 years, I feel certain I know why the chair was there. It was there because the graduate student had made his lab into a comfy little home-away-from-home. Mixing incompatible activities such as lab work and recreation is a safety hazard. Instead, the furniture and equipment in a chemical lab should be fire and chemical resistant. Labs are only for lab work. Office work, coffee breaks, and cat naps must occur in other rooms.

The problem is even worse in art schools. I have seen graduate art studios that contain furniture, flammable solvents, pillows, toxic paints, coffee makers, soldering guns, microwaves, grind wheels, non-fire-retarded drapes for privacy, small torches, and booze often in the same room. This is unsafe for the occupant and a fire risk for the building. Sometimes these graduate students learn this improper behavior from their teachers who use kitchen equipment in their classrooms.

Another issue raised by this story is related to the fact that the graduate student burned his hand while pushing the chair into the stair well. This means the chair was burning or smoking at the time. And if it had reignited in the hall or stairwell, it could have involved a larger area than his lab. Clearly, this individual didn't have proper fire emergency training.

Administrators in both the sciences and the arts need to get serious about this problem. They need to post clear rules for chemical use rooms and authorize technicians and environmental safety personnel to regularly inspect and confiscate inappropriate items found in any room in which toxic or flammable chemicals are used including labs, art studios, art classrooms, and theater shops.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artsandcraftstheatersafety.org

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues. Canada & Mexico are \$28/year. Other Countries are \$30/year. Checks must be payable on US banks in US funds. I enclose \$_____ for ____ year(s).

Name _____

Address _____

COPYRIGHT: ACTS, March, 2010

ISSN 1070-9274

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

April 2010

Vol. 24, No. 04

MONTREAL SCHOOL DISTRICT BANS "GREEN" CLEANERS

SOURCE: Canadian Broadcasting Co., News, February 26, 2010

Montreal, Canada's public health department is warning school boards across the city not to use biodegradable cleaning products, according to Radio-Canada. Dr. Louis Jacques, who works for the health department, reportedly said he has studied the research on such products, and is worried that the very substances that make them green could cause allergic reactions in children. The department decided to look into the research after a health and safety employee at La Commission Scolaire de Monreal, the city's largest French-language school board, brought attention to this issue.

Jacques said biodegradable products contain organic enzymes that help break down or biodegrade the detergents. He said it's those enzymes that need further study and perhaps regulation. "Based on the studies that have been done among workers, we know that these products can cause asthma, rhinitis, conjunctivitis and dermatitis," Jacques said. "But the most frequent health problem that was caused or aggravated by these products is asthma."

La Commission Scolaire and the Lester B. Pearson School Board, the largest English school board in Quebec, have already stopped using the products, according to Radio-Canada. The health board reportedly planned to make recommendations on green products, but no update has been reported.

COMMENT. ACTS has the same concerns. Enzyme exposure to workers in the detergent industry have long been known as a source of occupational asthma and other allergic reactions. Many of the individual enzymes have not been studied, but there is reason to believe they all have similar effects.

Dr. Jacques only mentioned the enzymes involved in breaking down the detergent itself to make it biodegradable or "green." But there are additional enzymes in many detergents which are tailored to remove certain specific stains such as blood, grass stains and the like. In addition to the enzymes, there are dozens of other additives in many cleaners that may be cause for concern.

DETERGENTS MAKE GOOD BLACK LIGHT PAINTS

SOURCE: Scenic_Artists_Forum@yahoogroups.com

Theatrical costumers and wardrobe workers know that garments washed in some detergents are likely to glow faintly in the dark. This happens because detergents often contain blue and white fluorescent dyes to make clothes appear whiter to the eye. The dyes are a problem in shows that call for a scene to end or start with a blackout. The blackout effect becomes unexpectedly comical when disembodied glowing white shirts and socks are seen moving silently on the darkened stage.

But this past week, a discussion on the Scenic Artist's forum among participants showed that some scenic artists are deliberately using the fluorescent dyes in detergents for black light effects. It seems that painting a transparent layer of certain concentrated detergents on to scenery will cause the painted areas to glow brightly under black light.

One artist noted that she prefers regular Tide for this purpose rather than special theatrical black light paints. The Tide is cheaper and, unlike the theatrical paints which show a slight glow under normal lighting, the Tide doesn't reveal any effect until it is exposed to black light. The only drawback noted was a tacky feeling on the detergent painted surface.

The fluorescent dyes in the detergent are probably as just unstudied for long term health effects as are the dyes in the theatrical black light paints. All dyes should be used with care.

BAKER'S ASTHMA REFERENCE

SOURCE: <http://www.irsst.qc.ca/files/documents/PubIRSST/RF-532.pdf>

An excellent data sheet on a very ancient occupational illness is available from IRSST* in Montreal. It's title is "Asthma in the Workplace - Baking and Pastry Arts - Prevention fact sheet." It was written by Brigitte Roberge, Éric Audet, and Denyse Gauthrin. The 6 page publication is free and can be found on their website by searching for Technical Data Sheet RF-532.

The fact sheet summarizes a study of 222 pastry students in Québec in 2007 which revealed that, only 12 to 18 months after they started their training:

- 16.1% have symptoms of rhinitis and conjunctivitis in the presence of flour.
- 1.6% have both an allergic reaction to flour and symptoms of rhinitis and conjunctivitis in the presence of flour.
- 4.3% have developed an allergic sensitization to flour.

COMMENT: Baker's asthma has been known for generations, but the new data shows how quickly a significant number of young people will develop physical responses to flour. The research is relevant to theater and film since flour is one of several substances used for dust effects.

* Insitut de recherche Robert-Sauvé in santé et en sécurité du travail (IRSST). It is a non profit organization located in Montreal and is comprised of both trade union and employer members.

CANADIAN TEEN ARRESTED FOR LASER ASSAULT

SOURCE: Canadian Broadcasting Company, News, April 6, 2010

A 19-year-old man from Ajax, Ontario, faces several charges after allegedly pointing a hand-held laser beam at an aircraft. Durham Region police said that the targeted aircraft was one of their own helicopters. Police said the helicopter was flying at an altitude of 365 meters over Ajax helping officers find a suspected drunk driver when they were hit with an intense green light from below.

Police said the pointer emitted a type of laser light that can burn through eyelids and blind people even if their eyes are closed. The pilot had to take immediate evasive action to avoid the laser strikes, but the light followed the chopper. The crew used an on-board infrared camera to pinpoint the location of the beam and found the suspect in the backyard of a house in Ajax.

Charges against Brendon Schownwald include obstructing police and endangering life under Canadian Aviation regulations. Police say more and more people are using laser pointers lasers to distract pilots. Pearson airport reports one to two incidents a week.

COMMENT. ACTS has covered accidental temporary blinding of pilots such as occurred over Las Vegas in 1995 when an entertainment laser hit a plane overhead (ACTS FACTS 6/96 & 9/99) and 12 cases of permanent partial blindness in people attending an open air festival near Moscow (ACTS FACTS 8/08). But we were unaware of deliberate attempts to harm aircraft were occurring.

FDA ALERT ON TEMPORARY TATTOO PRODUCTS

http://www.accessdata.fda.gov/cmis_ia/importalert_133.html, Import Alert # 53-14, Published Date: 10/02/2009;
Type: DWPE Import Alert Name: "Intensified Coverage of Temporary Tattoos Containing Non-Permitted Color Additives and/or Failing to Bear Ingredient Declaration."

The US Food and Drug Administration(FDA) issued an alert titled "Intensified Coverage of Temporary Tattoos Containing Non-Permitted Color Additives and/or Failing to Bear Ingredient Declaration" on October 2, 2009. (ACTS thanks Brian C. Lee, Toxicologist, for finding this item.)

The alert was in response to numerous trade complaints received from manufacturers and distributors concerning the importation and distribution of temporary tattoos (skin decals) from countries including Taiwan, Japan, the United Kingdom and Hong Kong that are non-compliant because they 1) contain unsafe color additives, 2) fail to bear ingredient declarations, and/or 3) bear an "FDA Approved" statement. FDA alert provides guidance for import inspectors the specific section of the code violated in these three cases.

These tattoo products and similar face and body paints find use as tourist products, in schools and craft projects, and special theatrical makeup effects. Since some of these unsafe products are probably getting through our inadequate import inspection procedures, ACTS suggests consumers and theatrical make up artists consider following some of the FDA inspector's guidelines. While consumers will not be able to identify the complex chemical and trade names of unapproved color ingredients, there are two of these FDA violations that are easy to recognize:

1. Failure to provide full ingredient lists. Be aware that skin decals and face and skin paints, require a complete ingredient label similar to that of all other cosmetics. Products that do not provide a list of ingredients on their labels should be immediately discarded.

2. Inclusion of the statement "FDA Approved" on labels. FDA does not approve any product. They only require manufacturers to use certified ingredients that meet FDA standards. Finding the "FDA Approved" statement on a label clearly indicates that the packager is not complying with US regulations. This statement is also an unfair trade practice because it implies that competing products that do not bear this label are inferior because they are not FDA Approved.

THE RED LIST. The list of non-compliant detained products which sparked FDA's alert, often referred to as the Red List, is also enlightening to read. The fact that two products made for Disney are included should make it clear that these products can be found in common use. And the two Disney products were labeled as containing ingredients that are unapproved for use on the skin!

Importer: Silver Fair, 8 On Yip Street, Chai Wan, CN. Date Published : 09/18/2009. Other Cosmetic and Cosmetic Products. Notes: temporary tattoos; **lacks ingredient declaration.**

Importer: Abc Cosmos Trading Co., Ltd., P.O. Box 67-647, 8F, No. 33 , Sec. 2, Chien Kuo N. , Taipei, TW. Date Published : 09/18/2009. Other Cosmetic and Cosmetic Products. Notes: **lacks ingredient declaration**; Glitter tattoo temporary.

Importer: Chiou Her Ent Co Ltd., 27 Ln 42 Sec 2 Kwang Fu Rd , San Chung City, TW. Date Published : 09/30/2009. Other Cosmetic and Cosmetic Products. Description: Disney Camp Rock and Disney Fairies Glitter Temporary Tattoos. Notes: **Labeling declares Yellow #12; Yellow #13; Red #74; Heliogen; Carbon Black which are non-permitted colors.**

Importer: Gala Land Ltd., 398 Chung Sham Rd , Taiwan, TW. Date Published : 09/18/2009
Other Cosmetic and Cosmetic Products. Notes: temporary tatoos (violation not listed).

Importer: Long King Printing, No.1 Lane 30 Kuang Fu, Sanchung, TW. Date Published: 09/18/2009.
Other Cosmetic and Cosmetic Products. Notes: temporary tattoo; **lacks ingredient declaration.**

GLASSBLOWING SANITATION QUESTION

ACTS received the following e-mail on 1/20/10: *My daughter is currently taking an introductory glass blowing college course. She has come down with the flu, and tells me that it is probably because multiple users do not clean the mouth ends of the blow pipes between uses. Apparently, it is just "not done." What can she use to clean the end of the pipe before she puts her mouth on it? Regular wipes have chemicals and taste bad...not a good idea. Any advice would be deeply appreciated.* Name withheld.

Glassblowers have always had this problem. I got my MFA degree in glass 'way back in the 1960s and we passed mono, flu, and every cold known back and forth. A sanitation procedure needs to be instituted despite the macho "it's just not done" attitude. Since people blow into the pipe and use the tip of their tongue to stop the air flow, there is also saliva and microbes up into the pipe a little way. A sanitary wipe would not be very protective. I thought of two procedures that might work:

- 1) Dip the mouth piece into a 1:10 bleach solution for a minute and then into a water rinse. The 1:10 bleach is not strong enough to seriously burn anyone if they make a mistake and the taste would alert a person right away that they need to rinse their mouth.
- 2) Put the mouthpiece end briefly in the glory hole at 2000+ degree Fahrenheit and then cool it back down in the ice bucket (which should always be there for burns). But I fear some idiot would put their mouth on it when it was still hot.

OK readers: any other ideas? I'd love to get some help with this one.

ACTS FACTS LATE: EDITOR WAS IN AMSTERDAM!

I apologize to readers for the newsletter being a week late. I was inspecting the new art conservation laboratories at the Rijksmuseum in Amsterdam and then taught a three day course on lab safety to 55 conservators from the Netherlands, Germany, Belgium, France and other countries from March 30 to April 1. I returned April 3 to a weeks worth of mail, e-mails, phone calls, and problems.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor
181 Thompson St., #23
New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, April, 2010
ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.
Canada & Mexico are \$28/year. Other
Countries are \$30/year. Checks must
be payable on US banks in US funds.
I enclose \$ _____ for ____ year(s).

Name _____
Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

May 2010

Vol. 24, No. 05

MANKATO, MN: SCHOOL DISTRICT EARNS OSHA CERTIFICATION

SOURCE: Mankato Free Press, Local News, Tanner Kent - Staff writer, April 24, 2010

After 14 years of planning and effort, Mankato Minnesota schools have earned top ratings in the federal OSHA Voluntary Protection Program designed to recognize work sites that have “achieved exemplary occupational safety and health.” Other organizations that have received certification include: Honeywell, Lockheed Martin, NASA, Exxon Mobile, L’Oreal, DuPont, Chevron and Pratt & Whitney. But Mankato is the first school district in the country to earn the designation.

The certification process requires volumes of data, inspections and a safety plan that is nothing less than comprehensive. “It’s rigorous,” said Superintendent Joe Meixl. “It can’t be smoke and mirrors.”

Meixl started the process about 15 years ago when another Minnesota school district received an expensive, and widely publicized, fine from OSHA. Wanting to gauge the efficacy of his own safety program, Meixl invited inspectors to the district to review programs and policies. Their verdict back then was that Mankato Area Public Schools were below average.

“So, I started chipping away little by little,” Meixl said. He developed emergency teams at district schools. He also developed threat assessment, first aid/CPR and crisis prevention teams. He began advocating a “bottom-up” safety model in which employees — as opposed to administrators — recommend safety policies. The roughly 1000 employees in the district all were on board.

Meixl began working with staff groups to find specific equipment that would reduce injuries:

- * He helped purchase and install a transport system at one school for severely disabled students that was hooked to a track on the ceiling, which reduced injuries related to moving and lifting students.
- * He found wheeled carts for teachers to use when transporting books and materials from the parking lot to the school so they wouldn’t lose their balance on snow and ice.
- * He purchased StopSaw® table saws for industrial arts classes. These saws stop automatically when the blade contacts skin, making it essentially impossible for an amputation to occur.

Administrative safety policies were also instituted. For example, Meixl helped develop a training checklist for science students to be gone over before they begin classroom experiments.

Gradually, Meixl began to see fewer worker’s compensation claims and fewer work-related injuries. As a result, Jerry Kolander, district business manager, began to see significant savings on district insurance costs. “We’ve been able to retain very good rates,” Kolander said. “Insurance companies look at how much risk you have and they look at our plan very favorably.” OSHA estimates that employees working at participating organizations miss work due to injury at a rate 52 percent less than industry averages.

Mankato schools officially earned their certifications in OSHA's Voluntary Protection Program in January (each school site was certified independently). This May, Meixl and the district will be recognized during a luncheon at the Capital with Governor Tim Pawlenty.

COMMENT. ACTS commends the Mankato school district and is only saddened that this is the only school that has chosen to pursue certification.

CALIFORNIA SCHOOL DISTRICT TO PAY \$750,000 HAZMAT FINE

SOSURCE: <http://www.signonsandiego.com/news/2010/jan/05/hazardous-materials-case-settled/>, *Union-tribune*, 1/5/2010, Mike Lee and Maureen Magee, Staff Writers

SAN DIEGO — San Diego Unified School District officials have agreed to spend more than \$750,000 on fines, new hires, training and audits to settle a \$1.26 million complaint from the county alleging widespread violations of laws governing hazardous materials. The agreement comes more than five years after county "hazmat" inspectors surprised science classes with impromptu inspections, showed up unannounced at auto shops to scrutinize oil storage and checked woodworking shops to see if chemicals were properly labeled.

The unprecedented classroom inspections of at least 10 campuses and other sites in late 2004 highlighted numerous alleged problems with underground storage tanks and handling of various toxic compounds. "I hate to single them out, but we did because they are largest" school district in the county, said Mike Vizzier, chief of the county's hazardous materials division. "The effect was to bring almost all of the others up to the standard very quickly."

At least two other districts, Sweetwater Union High and Santee, were cited for similar violations since 2004, but those problems were on a much smaller scale than San Diego's.

The county could have pressed for \$2.4 million in fines, but it knocked off more than \$1 million because of the school district's efforts to fix the problems. The penalty is among the 10 largest of its kind countywide since 2002. The district is poised to cut up to \$220 million from its \$1.2 billion operating budget next year due to state reductions in education spending.

Most of the \$750,000 fine will be paid from a fund of more than \$600,000 to hire the extra personnel. It also includes about \$60,000 in legal fees. The district faces additional costs to satisfy other mandates in the consent order. For example, the district must train biology, chemistry, art, auto shop and woodworking teachers on waste management and establish hazardous waste business plans.

COMMENT: Cyndy Day-Wilson, the attorney hired by the district to handle the case was reported as saying, "We're not sure what prompted this, we just know these kind of inspections were new to San Diego Unified." "Overzealous inspectors, that was our position. Inspectors just showing up in the middle of class ... checking to see if chemicals were properly labeled or if lids were on tight."

But clearly the problem is not the timing of the inspection, but the violations. The fact the San Diego district still has not trained their biology, chemistry, art, auto and wood shop teachers in waste management five years after the citation is disturbing. Sadly the facts in this article are consistent with the lack of environmental compliance I see in many schools at all levels of education.

OSHA PROPOSES \$130,800 FINE FOR WOODWORKING SHOP

BNA-OSHR, 40(16, 4/22/10, p. 336

The Occupational Safety and health Administration (OSHA) proposed \$130,800 in fines on April 19 against a Yonkers, NY, woodwork manufacturer for alleged fire, chemical, and amputation hazards. The agency said it cited H & H Woodworking Inc., a manufacturer of custom architectural woodwork, for 26 alleged willful and serious violation of safety and health standards after an employee's hand was partially amputated on an unguarded radial arm saw.

GUARDING. The inspection found no blade guards on the radial arm saw and on other saws. The unguarded saw blades resulted in two willful citations with \$84,000 in proposed fines. The rest of the fines were for violations in the following categories:

FIRE HAZARDS: The inspection also identified fire hazards including the accumulation of combustible wood dust; a failure to ground and bond segments of the plant's dust collection system; unbonded containers of flammable liquids; combustible residue accumulation on surfaces of spray booths; and no training in fire extinguisher use.

EGRESS AND ACCESS. Other hazards found during the inspection included a locked exit door, an obstructed exit route,

PROGRAMS & TRAINING. The inspection also found untrained forklift operators, no lockout-tagout program for energy sources, respiratory program deficiencies, and no chemical hazard communication program.

SAFETY EQUIPMENT & MEASURES. The inspection also found a lack of eye wash and shower stations for quick drenching of workers exposed to corrosive liquids, and insufficient protective measures for employees working with methylene chloride (a common paint stripping solvent which has a special OSHA standard).

FOOD. Workers were also found to consume food in areas where hazardous chemicals are used.

COMMENT. ACTS FACTS covered this story because the violations are typical of ones I see in theatrical shops and art studios in colleges and universities. All it takes in one accident such as this shop had to prompt and OSHA inspection that will uncover many other violations.

WESLEYAN STUDENT STABBED BY SAMUAI SWORD

Associated Press, April 16, 2010, reported in the Connecticut Post at CTPost.com.

According to the Associated Press, Wesleyan University officials say a student who was accidentally stabbed by a prop samurai sword during a student-produced play has been released from a hospital. Wesleyan spokesman David Pesci says the sword was a prop used in an April 15th performance at a building on the Middletown, Connecticut campus.

Pesci said Friday that the student was released from a local hospital after being treated for non-life threatening injuries. The student's name wasn't released. No other details were released.

SACCHARIN TO COME OFF HAZARDOUS WASTE LIST?

www.epa.gov April 2010

The U.S. Environmental Protection Agency (EPA) is proposing a rule to remove saccharin and its salts from the agency's lists of hazardous wastes, hazardous constituents and hazardous substances because it is no longer considered a potential hazard to human health. These lists are used to identify hazardous substances at sites across the country that need to be properly and safely managed. Saccharin is a white crystalline powder used as an artificial sweetener and can be found in diet soft drinks, chewing gum and juice.

Since the 1980s, saccharin was included in EPA's lists of hazardous wastes because it was identified as potentially causing cancer in people. In the late 1990s, the National Toxicology Program and the International Agency for Research on Cancer re-evaluated the available scientific information on saccharin and its salts and concluded that saccharin and its salts are not potential human carcinogens. Because the scientific basis for remaining on EPA's lists no longer applies, the agency is issuing a proposed rule to remove saccharin and its salts from the list.

COMMENT. Removing saccharine from the list will be comforting to industrial hygienists who use the saccharin test for fit testing respirators. It was always hard to explain to those being fit tested how we would keep them safe by spraying a carcinogen and listed hazardous waste in their faces!

GARY NULL NEARLY KILLED BY HIS OWN PRODUCT

Daily News, Jose Martinez, April 28, 2010 & www.quackwatch.org

Gary Null filed suit against Triarco, the manufacturer of Gary Null's Ultimate Power Meal. Null contends he experienced "excruciating fatigue" that left him unable to walk and forced him to fly back to New York and cancel lectures, counseling and filming. Thinking that his Power Meal would help, he continued to take the supplement. "Null would later be told that if he had not flown back to New York and seen his doctor, then he could have died...", the suit says.

Null was sequestered, fasting, and consuming massive amounts of water as he was told there was no medical treatment to remove the excess vitamin D in his system. Null's suit accuses Triarco of inadequate safety testing that led to six consumers being hospitalized with severe kidney damage.

ACTSFACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@es.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, May, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.
Canada & Mexico are \$28/year. Other
Countries are \$30/year. Checks must
be payable on US banks in US funds.
I enclose \$ _____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

June 2010

Vol. 24, No. 06

FIREWORKS REGULATIONS HELP CATCH TIMES SQUARE BOMBER

SOURCE: American Fireworks News, issue #. 345, June, 2010, p. 3

According to the *American Fireworks News*, a fireworks retailer played an important part in the rapid capture of the Times Square bomber. Shortly after the smoking car in front of the theater playing *Lion King* was cordoned off and the bomb was disabled, police knew that a fireworks product was supposed to have initiated the blast. These fireworks were M-88, 50 milligram fire crackers that are legal in New York.

Investigators knew it was crucial to find out where these fireworks were purchased. Early on, it was assumed that one of the Phantom Fireworks outlets where M-88s are available may have been the source. One Phantom store at Matamoras, Pennsylvania, was looked at as a likely location because it lies a few feet north of the first exit of I-84 in Pennsylvania. This highway is a rapid connection between Connecticut and Northeast Pennsylvania.

This store has good internal security. For one thing, the store must prevent Pennsylvania residents from entering the section of the store devoted to items that they are not permitted to purchase under their state fireworks regulations. The M-88s are not legal for Pennsylvania residents to own and use. Sales of M-88 and other off-limits merchandise can only be legally purchased by residents of other states. For this reason, everyone seeking such purchases must show proper identification.

The terrorist did exactly that, and a photocopy of his identification was found among the documents for the day of purchase. Videotapes from store cameras showed the bomber and his purchases. The store's assistant manager was quoted as saying that he remembered the transaction and the bomber acted like an average customer.

COMMENT. ACTS applauds Phantom's tight security and adherence to the regulations which, in this case, provided hard evidence of the bomber's connection to the Times Square incident. Often I hear fireworks and pyrotechnic chemical suppliers complain about the state and federal regulations that apply to them, but clearly they serve an important purpose.

However, I am concerned that there are many states and retailers of fire works that do not have these kinds of restrictions or security measures. And illegal fireworks also are not difficult to obtain. In addition, it is even possible to obtain the raw materials for fireworks from a number of pyrotechnic chemical websites. These companies often require purchasers to pick the chemicals up, since many of these chemicals are potentially explosive and cannot be sent through regular mail and parcel services. I can only hope that these outlets also have security cameras and identification procedures.

New York was very lucky that this terrorist was not very knowledgeable about pyrotechnics and bomb making. Unless we have good regulation of these products, next time may be different..

LEED PROGRAM FOUND FLAWED

SOURCE: www.ehhi.org, The Green Building Debate, John Warago, Ph.D.

Under the auspices of a nonprofit organization called Environment and Human Health, Inc., Yale Professor, John Wargo, wrote a critique of the Leadership in Energy and Environmental Design (LEED) program. LEED is a certification program of the Green Building Council. It evaluates new construction and major renovation projects and assigns points or scores for categories such as energy efficiency, site renovation, innovative design, efficient waste management, use of recycled materials, access to public transit, and use of building materials deemed to be environmentally responsible.

The LEED staff awards certificates according to accumulated points for “platinum,” “gold,” or “silver” performance. These designations are of economic value, as they tend to increase property resale value. Governments at all levels have adopted new laws that reward LEED certification by providing loan guarantees, lower-interest loans, mortgage interest rate reductions, income tax credits, property tax reductions and other public subsidies.

John Wargo implies that the effects of some of the LEED guidelines are to make buildings less safe for human habitation. For example, energy saving technologies encourage tighter buildings, resulting in lower levels of exchange between indoor and outdoor air. This effect may intensify chemical exposures from off gassing building materials and other indoor pollution sources. The LEED credit system awards nearly four times as many credits for using energy conservation technologies than they award for protection of indoor air quality from hazardous chemicals.

Dr. Wargo says his critique was not meant to diminish to importance of LEED, but to sound that alarm about the dangers of broad adoption of LEED standards unless the award system is changed to require protection of human health from hazardous chemicals. He points out that the Green Building Council Board has little expertise in environmental health. The report says that “Directors of the LEED Program are predominantly engineers, architects, developers, real estate executives, chemical industry officials and building product manufacturers. Wargo notes that of the 25 directors, only one medical doctor from Physicians for Social Responsibility was recently appointed to the board. Wargo concludes that “No Level of LEED Certification Assures Health Protection.”

COMMENT. The findings of this report are consistent with ACTS observations. In the past, we have covered two studies showing that the amount of fresh air coming into buildings is directly related to children’s performance in school (ACTS FACTS July 2002, November 2006). Based on these studies and others, ACTS does not recommend using the ventilation standards endorsed by LEED, that is, the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) ventilation standard, ASHRAE 62-2007. We feel that the larger amounts of air recommended in the earlier ASHRAE 62-2001 standard are more appropriate. And we do not agree with ASHRAE’s assurances that the location of supply and return grilles and other features in 62-2007 compensate for these lesser amounts of air.

In addition, many of the LEED standards are inappropriate for buildings in which toxic substances are used as part of the activities such as in art studios, theater shops, and craft work areas. In order to properly ventilate these areas, large amounts of energy must be used to exhaust contaminated air and condition and supply equally large amounts of fresh air. With out this perceived “waste” of energy people will not remain healthy in these areas.

This is a very complex issue and we recommend all building planners download “The Green Building Debate” from www.ehhi.org and draw their own conclusions.

FIRE RETARDANTS AGAIN LINKED TO BRAIN DAMAGE

SOURCE: Betts KS 2010. An Inkling of Suspicion: Prenatal Exposure to PBDEs and Neurodevelopmental Impairment. *Environ Health Perspect* 118:a216-a216. doi:10.1289/ehp.118-a216a. Betts writes about a study by Herbstman, et. al., [EHP 118:712–719; Herbstman et al.] Online May 1, 2010

A seven year study of more than 150 children has shown a connection between a pregnant woman's exposure to brominated fire retardants and adverse effects on brain development of their offspring. This is the second study to show a link between these chemicals and brain development problems.*

BROMINATED FIRE RETARDANTS. Polybrominated diphenyl ether (PBDE) flame retardants have been used for decades in a wide variety of goods, including automobile and airplane components, electronics, and home and office furnishings. The toxicologic evidence linking PBDEs to adverse health effects led the European Union to use the precautionary principle as the basis for banning all three PBDE chemical classes which are those containing five (penta), eight (octa), and ten (deca) bromine atoms.* In the United States, manufacturers voluntarily discontinued the penta and octa formulations in 2004 and have agreed to phase out deca by the end of 2012.

THE STUDY. The study is called a “longitudinal cohort study” because it follows a select group of subjects that have been uniquely exposed to a chemical over a period of years. In this case the study subjects are the children of mothers who were pregnant at the time of the World Trade Center attack in 2001 and who gave birth at a hospital within 2 miles of the WTC site. The women were recruited to study the effects of exposure to compounds in dust from the decimated towers. The PBDEs were measured in the cord blood of 210 infants, and 152 of these children later participated in at least one round of neurodevelopmental testing conducted at ages 1, 2, 3, 4, and 6 years.

FINDINGS. The children with higher levels of PBDEs consistently had, on average, lower developmental scores at each time point compared with less-exposed children; the association was particularly evident at age 4 years. The researchers were not able to evaluate associations with developmental delay because few children had developmental scores low enough to meet the criterion for this outcome. However, in many cases average test scores in children with exposures in the highest 20% were 5–11 points lower than average scores for less-exposed children.

Although some evidence suggests the PBDE exposure seen in the children could be related to the dust and pollution created by the WTC attack, the authors say “it is certain” that sources other than the WTC contributed to the PBDE levels in the infants' cord blood. They feel certain this is the case since the levels observed in these children were in ranges similar to those in other U.S. populations. The implications of this are that the observed neurological effects are probably widespread.

According to the authors, these findings are consistent with reports of hyperactivity and learning and memory deficits in experiments with mice exposed neonatally to PBDEs. Other work, most recently a laboratory study using human cells [EHP 118:572–578; Schreiber et al.], suggests PBDEs may interfere with thyroid hormones critical for normal brain development. The authors point out that additional studies exploring associations between PBDE exposure and developmental effects are under way. In the meantime, they say identifying opportunities to reduce people's exposure to these compounds should be a priority.

COMMENT. Fire retardants are just one class of chemicals that are made in billions of pounds a year and are now in the blood of our offspring from birth. In addition, there are chemical solvents

in many cleaning products and paints that do not remain in the body but which are known to cause neurological damage. It is time to look at all of these chemicals for possible causes of brain and developmental problems including autism.

* The first epidemiologic study to link PBDEs with evidence of adverse effects on brain development was published in Environmental Health Perspectives last year [EHP 117:1953–1958; Roze et al.].

** These “classes” of PBDEs are actually mixtures of many isomers in which the numbers of bromine atoms on the diphenyl ether structure are predominantly 5, 8 or 10. All the PBDEs are suspect and all of them should be banned.

GRINDING OPERATION STARTS MILLION-DOLLAR FIRE

SOURCE: *NFPA Journal*, May/June 2010, p. 43

Workers using grinders while building a parade float in a city-owned garage in California created sparks that inadvertently ignited foam insulation stored in the structure, starting a fire that heavily damaged the building and its contents. The one-story, wood-framed garage, which was 240 feet long and 34 feet wide, had a metal roof and several metal roll-down garage doors along one side. It had no fire detection or suppression equipment, although it was equipped with portable fire extinguishers. The garage, in which the city stored vehicles and equipment.

The float builders were making a metal frame for the float when sparks of hot slag ignited the insulation. They called 911 and firefighters arrived minutes later to find smoke and flames coming from two garage bays and threatening nearby exposures. The building, which was valued at \$1.5 million, contained \$1 million worth of equipment and vehicles. Damage to the building was estimated at \$750,000 while damage to its contents was estimated at \$500,000. There were no injuries. The fire investigator noted in his report of the incident that the float builders had not followed procedures to shield the grinding operations from combustible materials.

COMMENT. I often see large amounts of Styrofoam and other plastic foam materials stored in scene and prop shops where grinding and even welding is done. OSHA prohibits welding within 35 feet of combustibles such as plastic foam unless there is a floor-to-ceiling wall between the two operations. Welding curtains do not suffice. The same rule should be applied to any operation in which hot sparks are produced such as metal grinding and cutting.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations. ACTS takes no money from industry or any party having a financial interest in our opinions about art or theater products.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: *ACTS FACTS*,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artsandcraftstheatersafety.org

COPYRIGHT: ACTS, June, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.

Canada & Mexico are \$28/year. Other

Countries are \$30/year. Checks must be payable on US banks in US funds.

I enclose \$_____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

July 2010

Vol. 24, No. 07

OSHA SAYS SMALL FINES PROMOTE LAX SAFETY PRACTICES IN THE ENTERTAINMENT INDUSTRY

SOURCE: *Palm Beach Post*, staff writer: Eliot Kleinberg, 6-2-10 & *OSHR-BNA*: 40(22), 6-3-10, p. 466

On December 3, 2009, Fenton "Andy" Hollingsworth, age 27, was killed when he fell 25 feet from the lights he was installing in the Rinker Playhouse theater in the Kravis Center for the Performing Arts in Palm Beach, Florida. The catwalk he was on had no guard rail or other fall protection in violation of Occupational Safety and Health Administration (OSHA) fall protection regulations.

Six months later, May 27, 2010, OSHA announced their final settlement with the Kravis Center. Originally OSHA proposed fining Kravis \$4,900, a portion of the maximum fine of \$7,000 for a "substantial probability of death or serious physical harm" finding. Then OSHA reduced the fine by 20 percent because Kravis is a small company and another 10 percent because Kravis had not had any other incidents in three years. This left the total fine at a piddling \$3,675.

David Michaels, the OSHA Director, used this case as an example of small fines being partly responsible for lax safety standards in the entertainment industry. "We've seen several examples of employers in the entertainment industry that have not provided precautions adequate to protect workers. And we've seen fatalities as a result of that," he said in a conference call with reporters. "There's a tremendous amount of risky work in these facilities and safety is often not considered the highest priority in these cases," Michaels said.

Testifying in Washington DC before the House Subcommittee on Workforce Protections on March 16th, Michaels noted that while the Federal Communications Commission can fine a radio station up to \$325,000 for indecent content, and OSHA is permitted to fine up to \$70,000 for willful and repeated violations, OSHA's average one-time fine is \$1,000, and \$5,900 when someone is killed.

And, Michaels said, "Unscrupulous employers often consider it more cost effective to pay the minimal OSHA penalty and continue to operate an unsafe workplace than to correct the underlying health and safety problem. The current penalties do not provide an adequate deterrent. "Simply put, serious violations of [OSHA rules] that result in death or serious bodily injury should be felonies like insider trading, tax crimes, customs violations and anti-trust violations. Nothing focuses attention like the possibility of going to jail," Michaels told the lawmakers.

While most people think of offshore oil rigs, mines and logging as dangerous, the entertainment industry can be as well, as evidenced by the Hollingsworth's death as well as a fatal attack by a killer whale on a Sea World and three employee deaths last year at Walt Disney World, OSHA spokesman Michael Wald said this week.

As part of the settlement, Kravis "agreed not to contest the serious citation and agreed to abate the violation by requiring workers to use power lifts to reach lighting areas rather than allow workers to use catwalks," according to Wald.

COMMENT: The fault for the Kravis Center accident lies not only with the employer. I think the architect and theater design consultants could be held liable. When Kravis Center opened in 1992, all the OSHA fall protection and guard rail regulations were in force. There should have been rails. Unfortunately, catwalks without rails or with light poles 55 inches above the walk are still being built. With the smaller lighting instruments today, we can place the light pole at 42 inches with a removable chain midrail and a 4 inch toe board to create OSHA-compliant catwalks.

The balcony is another area that is often designed with built-in OSHA violations. Most building codes allow balcony rails to be only 27 inches high to preserve audience sight lines. But it is an OSHA violation for employees to work near this rail such as when cleaning or repairing the balcony. Instead, the balcony rail should be designed with one of several types of extensions which can be pulled up to 42 inches when workers are present. And if the outside of the balcony rail has a pole for hanging lighting instruments, the consultants must design access to 5000 pound anchorage for fall protection lanyards so workers can set those lights safely.

In addition, the orchestra pit needs guarding at all times and at every level at which it can be set in order to be OSHA-compliant. There are so many attractive and effective ways to do this that there is no excuse for seeing the same old unguarded pits.

POWDERED ALUMINUM AND IRON OXIDE CAUSE CHEMICAL EXPLOSION

The Atlanta Journal-Constitution, by Mike Morris, 6-2-10

Two Georgia Tech students were seriously burned on June 2nd in a chemical explosion behind a fraternity house. The incident happened about 12:30 a.m. at the Zeta Beta Tau fraternity house. The men, ages 20 and 21, were burned as they tried to mix aluminum powder and rust powder.

One student was Tommy Keen, a sophomore aerospace engineering student. The other was Paul Grzybowski, a junior materials science student. The students were taken to a hospital for treatment of first- and second-degree burns to their upper bodies. Both were listed in critical condition.

Mechanical engineering student Michael Parker was at an adjacent fraternity house when the incident occurred. Parker told a local radio station reporter that Keen and Grzybowski had mixed aluminum powder and rust (iron oxide) powder in an experiment that he called "high school basic chemistry." The experiment can produce a pyrotechnic effect, much like a huge sparkler.

"It's real simple to get; you don't have to really go very far to get the materials," Parker said. "You just put them together and ignite them with a butane torch and it's called a thermite reaction." Parker said the resulting reaction "runs thousands of degrees Celsius – it's molten iron." He explained that "Once the reaction has actually started, it's literally just molten iron, but it can get out of control if you don't have it set up right."

COMMENT: Often scenic artists or fine art students have aluminum powder as a silver pigment and powdered red iron oxide pigments. It is these two simple substances that can cause this reaction. In fact, aluminum powder alone, suspended in air can explode in a ball of fire if even the slightest static electrical discharge or a source of flame is brought near. Aluminum powder is, for this reason, a common fire works ingredient.

We become complacent when we see these powdered pigments sitting year after year quietly in their containers. But don't let them fool you. Under the right circumstances, they can be deadly.

THIS EDITOR WRITES LETTER TO THE EDITOR OF C&EN

C&EN, 6-28-10, pp. 5-6

Occasionally I read something that makes me so mad that I have to write a letter. It happened again last month when I read an editorial by Rudy M. Baum, Editor-in-Chief of *Chemical & Engineering News*. In the May 31st issue, Baum wrote a scathing review of the President's Cancer Panel report. This report emphasized the role of environmental chemicals as a likely cause of high cancer rates. Editor Baum called the report a mess and ended by saying:

Serious research is being done on this subject, and known carcinogens are regulated accordingly. The alarmist report from the President's Cancer Panel does a disservice to this serious work.

Well, for decades very little testing has been done. Most recent testing is being forced on US manufacturers by a European Union program that will ban any of about 30,000 chemicals if they do not provide data on them by 2012. And regulation is proceeding badly. EPA couldn't even make a ban on asbestos stick. The following response to Editor Baum was published in the June 28th issue.

The Editor of C&EN thinks that the report by the President's Cancer Panel is, "in a word, a mess." Actually, this report reflects the fact that the medical community has finally learned enough chemistry to understand what the chemical industry has been doing all these years.

A good example is seen in the history of PCBs. It took over 30 years of studies and scientific fisticuffs to finally get them restricted. But industry didn't miss a single production deadline when they were banned. They just replaced the chlorine with bromine on those same biphenyl and biphenyl ether structures. Out went the untested brominated biphenyls and brominated biphenyl ethers into every home in the US. Those brominated chemicals and the PCBs left over from industry's prior experiment on our health were found in the blood of our children for the Cancer Panel to report.

There are hundreds of substitution stories exactly like this, only the classes of the chemicals change.

The Cancer Panel also knows that only about 900 chemicals worldwide have been evaluated for their cancer effects. Yet the European Union has registered 143,000 chemicals for use in commerce. We probably use as many chemicals. Maybe more. After all, C&EN covered the news that on September 7, 2009, the Chemical Abstract Service registered its 50 millionth chemical.

Even more interesting was the fact that the last 10 million of these chemicals were registered by the CAS in the 9 months prior to September 7th at a rate of 25 per minute. The primary sources for these chemicals were not scientific abstracts as in the past. Instead, most were found in patents and chemical catalogs. In other words, some of these chemicals are already available.

At this rate of generation, there is no time for testing the new chemicals. Consumers and the medical community used to assume manufacturers made sure their products were safe before they sold them to us. Now they know that most of the chemicals in their products have never been tested for cancer or other chronic hazards and they are disillusioned.

The American Chemical Society needs to address these ethical and scientific issues in the President's Cancer Panel report. I suggest not emphasizing the lack of toxicity data available to quantify the effect of the pollutants on the cancer rates. Everyone already knows whose fault that is.

HAIR DRYER PROPOSED FOR THE “SUBSTANTIAL PRODUCT HAZARD” LIST

CPSC, Notice of proposed rulemaking, 75 FR 27504-07 May 17, 2010

The new Consumer Product Safety Improvement Act authorizes the US Consumer Product Safety Commission (CPSC) to specify any consumer product or class of consumer products as a substantial product hazard. In the May 17th Federal Register, the Commission proposed a rule to list any hand-held hair dryer without integral immersion protection as a substantial product hazard. This status would enable CPSC to provide greater surveillance and control of such products including watching for imported dryers which may be substandard.

The CPSC has reports of 104 deaths and 43 electric shock injuries due to hair dryers being accidentally immersed in or contacting water from 1984-2004. There was a reduction of deaths over time due to two changes in the Underwriters Laboratory (UL) requirements for hair dryers. First, in 1987, UL required immersion protection for hand-held dryers if the dryer switch was in the “off” position. Still, between 1987-90, a total of 39 such electrocutions (9.75 annual average) were reported.

In 1991, a second revision to the UL standard took effect. This one required immersion protection in the “off” as well as “on” position. From 1991 to 1997, a total of 12 electrocutions were reported and only three electrocutions were reported during 1998-2007, a period when most hair dryers made before 1991 were likely to be out of use. Reporting is ongoing for the years 2006 and 2007.

The safer hand-held hair dryers can be recognized easily. The power cord has a large block-shaped plug that incorporates a type of circuit interrupter which is either a Ground Fault Circuit Interrupter (“GFCI”), an Appliance Leakage Circuit Interrupter (“ALCI”), or an Immersion Detection Circuit Interrupter (“IDCI”). The plug usually also has buttons labeled “Test” and “Reset.”

COMMENT. I covered this issue because I see the old unsafe hair dryers in almost every scene shop, film location, and occasionally in art and craft studios. They are used to dry paint more quickly. Theater and film industry dressing rooms also have them. These old dryers are a hazard in our workplaces and they should be replaced with the safer ones.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Paneia Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations. ACTS takes no money from industry or any party having a financial interest in our opinions about art or theater products.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, July, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues. Canada & Mexico are \$28/year. Other Countries are \$30/year. Checks must be payable on US banks in US funds. I enclose \$_____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

August 2010

Vol. 24, No. 08

TWO BILLS FOR SAFER CHEMICAL POLICIES INTRODUCED

Editorial based on my interview, Leonard Lopate, WNYC, NPR, August 4, 2010

On April 4, 2010, Senator Frank R. Lautenberg introduced a bill (S. 3209) called the Safe Chemicals Act of 2010. This is Lautenberg's third attempt to introduce legislation with this intent. In 2004 and 2008 he introduced the Kids Safe Chemicals Acts. Neither one made it out of committee.

Then on July 22, 2010, Bobby L. Rush and Henry A. Waxman introduced a similar bill (H.R. 5820) called the Toxic Chemicals Safety Act of 2010. Both the Senate and the House bills would reorganize and amend the Toxic Substances Control Act (TSCA) in order to give EPA the power to compel industry to test the toxicity of more of the chemicals they produce.

AREN'T CHEMICALS ALREADY TESTED? It is difficult for US consumers to understand why these bills are important. They have been buying products for use in their homes for years based on their advertised safety claims. Surely, they reason, manufacturers couldn't make those claims or sell products for use around their children if the products weren't already proven to be safe.

But the fact is that there are well over 100,000 chemicals in commerce and at least 60,000 are found in products we use. Yet only about 900 chemicals world wide have been tested and evaluated for their cancer potential. And even smaller number of chemicals have been tested for their effects on the fetus, young children, or our reproductive systems. Manufacturers feel they can claim their products containing untested chemicals are safe because no one can prove otherwise. In fact, many products containing untested ingredients are labeled "nontoxic!" In the art materials industry, this is especially egregious because many of the main ingredients are untested organic pigments which are in chemical classes that are suspected to be associated with cancer and other long-term effects.

WHAT'S WRONG WITH TSCA? TSCA was supposed to provide oversight and testing of chemicals when it was instituted in 1976. It gave the Environmental Protection Agency (EPA) authority to require testing of "new" chemicals proposed for use in our products. Unfortunately, it gave them little power to regulate roughly 63,000 chemicals already in use prior to 1976!

But the worst aspect of TSCA is it's built-in Catch 22. In order to regulate a chemical, EPA must prove the chemical poses an "unreasonable risk." Proving "unreasonable risk" takes a lot of data—the very data that manufacturers don't have because they don't do the tests. And it takes years for EPA to compel the manufacturer to test and then years more for the tests to be completed. Cancer tests take two years. Tests for birth defects, reproductive and developmental damage take up to five years.

The limits of TSCA are well-understood in Washington. A 2004 Government Accountability Office (GAO) report described the regulatory hurdles TSCA poses. The GAO estimated that simply issuing the rules required to obtain toxicity and chemical exposure information from industry can take from two to ten years and is incredibly labor-intensive.

Once the data is obtained and an “unreasonable risk” has been proven, the EPA must then apply the “least burdensome requirement,” meaning the cheapest method, to protect the public or the environment, and must “prove that no other federal law can address the health or environmental risk.” The GAO says that “Given the time and resources required, the agency has issued rules requiring testing for only 185 of the approximately 82,000 chemicals [currently] in the TSCA inventory.” Of these, GAO found that only 169 chemicals had actually been tested!¹

Even if the EPA finally jumps through all of the hurdles, industry can take the EPA to court to delay enforcement of a ban or overturn it. For example, based on substantial scientific data about the cancer-causing effects of asbestos, the EPA banned the substance in 1989. On an asbestos industry challenge, and the rule banning asbestos was overturned in 1991 by a U.S. Court of Appeals. The court ruled that the EPA failed to prove a ban was necessary because it poses a substantial risk.² If the EPA can’t even make a ban on asbestos stick, TSCA is a blind alley.

The GAO suggested improving this situation by giving EPA the authority to require chemical substance manufacturers and processors to test their chemicals without all this effort. That is what the European Union did when it established a program in 2006 called REACH (Registration, Evaluation, Authorization [and restriction] of Chemicals). In fact, REACH required manufacturers to test roughly 30,000 high production volume chemicals, that is chemicals manufactured in amounts over 1000 tons per year. If the data is not provided by 2012, manufacturers must cease using them in products sold in the European Union. So unless our US manufacturers are already busy testing, some of them will lose the European Union’s market of 450 million consumers in two years!

THE BURDEN OF PROOF. Another problem with TSCA is the incredible cost to taxpayers who must support EPA’s expensive and time-consuming efforts to prove chemicals pose an unreasonable risk. That would change if either of the two new chemical safety bills are passed. Both the Senate and the House bills shift the burden of proof from the EPA to industry. Here what they say:

HOUSE BILL: “The manufacturers and processors of a chemical substance or mixture shall bear the burden of proving that the chemical substance or mixture meets the safety standard.”

SENATE BILL: It shall be the duty of---

- (i) the manufacturers and processors of a chemical substance to, at all times, bear the burden of proving that the chemical substance meets the applicable safety standard: and
- (ii) The Administrator [the EPA official] to determine whether the manufacturers and processors of a chemical substance have met the burden of proof under clause (i).

At first, the House version sounds neat, simple and clean--until you think about it. It is silent on who decides that the chemical meets the safety standards. I fear that the manufacturers could argue that their experts and toxicologist have determined that the chemical meets the standard. Then, it becomes once again a battle between experts that could end up in the courts.

These two bills are 166 and 169 pages respectively. The House bill is easier to read and a little shorter, but I’ve concluded that the Senate bill would do the most for us. I encourage everyone to take a look at these bills and decide for themselves. But neither bill goes far enough.

For example, both bills require EPA to develop a list of priority chemicals which manufacturers must study. But this list is limited to 300 chemicals--a long way from REACH’s 30,000. The Senate bill is silent on which 300 chemicals EPA will select for testing. The House includes 300 chemicals

EPA must put on their first list of 300. Most of these chemicals are ones that we've heard of such as bisphenol A, formaldehyde, chromium (VI) compounds, some phthalate plasticizers, and perc (a dry cleaning solvent). I think there already is more data on some of these substances than most and some are already regulated to some extent. But the strategy of listing these chemicals might be useful to get a number of activist groups on board.

And perhaps, with careful planning and watching the data that is being accumulated by REACH, this piddling list of 300 could be effectively used to fill in worldwide data gaps.

One problem that will have to be addressed is we will have to give up the economic advantages of releasing massive amounts of untested chemicals on the public. Products are cheaper when manufacturers don't spend time and money on toxicity testing. And the speed at which new chemicals and products are developed and introduced to the market is astonishing.

Just how astonishing is seen in the statistics compiled by the Chemical Abstract Service (CAS). This service combs through many sources looking for every new chemical as it is invented and assigns it a number. On September 7, 2009, CAS registered it's 50 millionth chemical. The first 10 million of these chemicals took 33 years to register and the major source for them were scientific papers. The last 10 million of these were registered in nine months at a rate of 25 chemicals per minute!³ And these 10 million were found primarily in patents and chemical catalogs. In other words, some of these brand new chemicals are already available.

Obviously, no matter what we do, the chemical industry had out-run us. But we must start. As the Senate bill explains in its findings: "the incidence of some diseases and disorders linked to chemical substance exposures is on the rise;" and "biomonitoring of chemical substances in humans reveals that people in the United States carry hundreds of hazardous chemicals in their bodies."

In the long run, the bills are good for us and for business. We need access to world markets. Portions of the bills support development of safer and greener products, better tests using few animals, and establishment of a children's environmental health program. It's our children and their children that we need to speak for now.

1. *Chemical Regulation: Options Exist to Improve EPA's Ability to Assess Health Risks and Manage Its Chemical Review Program* (GAO-05-458), Report to Congressional Requesters, pp. 1-69, especially pp. 50-52

2. *Corrosion Proof Fittings v EPA*, 947 F.2d 1201, 33 ERC 1961 (U.S. Court of Appeals for the Fifth Circuit), 1991.

3. Matthew Toussant, the senior vice president of editorial operations for CAS, writing on the Editor's Page, "A Scientific Milestone," *Chemical and Engineering News*, vol. 87, no. 37, p. 3, September 14, 2009

NOTE: The editor apologizes for newsletter being a week late. But the issues presented by these chemical safety bills are so important that I decided to wait until after I covered them in an interview with Leonard Lopate on WNYC (National Public Radio) on August 4th. The article is based on my notes for the program and some of the comments I received both on the air and off.

OFF CAMPUS HOUSING FIRE HAZARDS

NFPA Journal, "Crowded House," Ben Klaene and Russ Sanders May/June 2010, page 50

Over the 10-year period from 2000 to 2009, fires in student housing resulted in 136 fire deaths, 114 of which occurred in off-campus housing, according to *Campus Firewatch*, a monthly electronic newsletter consulted regularly by fire professionals. The number of deaths in off-campus housing are probably understated, because such fires are compiled using media reports which do not necessarily report on whether or not the victims are college students.

Students at many colleges and universities live in off-campus housing that the school does not own or supervise. Such housing often consists of single- or two-family houses designed to for a family of four or five that are now occupied by many more people than the buildings were designed to accommodate. Many of these houses are older properties that lack sufficient wiring capacity for electrical equipment commonly found in campus housing, such as computers, microwave ovens, portable heaters, and air conditioners. And most are not protected by sprinkler systems.

The behavior of occupants must also be considered. When students living in off-campus housing invite other students to social events, excessive alcohol consumption is commonplace, resulting in both cognitive and physical impairments. It is not surprising that many victims of fatal off-campus housing fires have elevated blood-alcohol levels. Overcrowding is also common at such events, as many of the invited guests end up sleeping over. Too many people who are unfamiliar with the layout of the house and who may be intoxicated or impaired, add to the problem.

Fighting these fires is also complicated because off-campus housing usually has smaller common areas and more subdivided bedrooms than on-campus dorms. This makes getting water to the burning areas harder and the building is harder for firefighters to ventilate for smoke control.

Many colleges and universities are placing sprinkler systems in their dormitories and increasing fire inspections of their properties. But they also need to consider more ways to protect off-campus housing which is apparently at even greater risk of fires.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations. ACTS takes no money from industry or any party having a financial interest in our opinions about art or theater products.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: *ACTS FACTS*,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, August, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.

Canada & Mexico are \$28/year. Other

Countries are \$30/year. Checks must

be payable on US banks in US funds.

I enclose \$ _____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

September 2010

Vol. 24, No. 09

OSHA PROPOSES \$75,000 FINE AGAINST SEAWORLD IN WHALE TRAINER'S DEATH

SOURCE: *BNA-OSHR*, 40(34), 8-26-10, pp. 718-719 & OSHA press release # 10-1124-ATL

On August 23, SeaWorld of Florida LLC was assessed \$75,000 in penalties proposed by the Occupational Safety and Health Administration. The citations were issued after an OSHA inspection was triggered by the death of an animal trainer. The three citations were: a willful violation of the general duty to provide protection from recognized hazards (Section 5(a)(1)); a serious violation for exposing workers to a fall hazard on the bridges leading to the stage platform; and an other-than-serious violation for failing to equip outdoor electrical receptacles with weatherproof enclosures.

According to an OSHA press release, “[v]ideo footage shows the killer whale repeatedly striking and thrashing the trainer, and pulling her under water even as she attempted to escape.” OSHA further said the whale had been involved in a previous animal trainer death, in 1991, and that SeaWorld knew the animal’s history. Further, said OSHA, SeaWorld trainers had an “extensive history of unexpected and potentially dangerous incidents involving killer whales at its various facilities.”

“SeaWorld recognized the inherent risk of allowing trainers to interact with potentially dangerous animals,” Cindy Coe, OSHA’s regional administrator in Atlanta, said in an August 23 statement. “Nonetheless, it required its employees to work within the pool walls, on ledges, and on shelves where they were subject to dangerous behavior by the animals.”

SEAWORLD RESPONDS. Fred Jacobs, vice president of communications at SeaWorld Parks and Entertainment, told the Bureau of National Affairs on August 23 that the company plans to contest the citations, calling them “unfounded” and that they “reflect a fundamental lack of understanding of the safety requirements associated with marine mammal care.” Jacobs said further, “while maintaining a safe environment for our trainers, the demands of humane care require our zoological team to work in close physical proximity to these animals,” Jacobs said. “Our trainers are among the most skilled, trained, and committed zoological professionals in the world today.”

INDUSTRY LAWYER HAS QUESTIONS. David Sarvadi, an industry attorney with Keller Heckman LLP, wonders whether OSHA’s citations were legitimate under the General Duty Clause since there is no standard for animal training. He asked, “[a]ssuming that SeaWorld had certain procedures in place to protect the trainers and performers, the question is, what is OSHA going to assert should have been done?” However, OSHA says in the citations that contact with animals known to be dangerous should be avoided or accomplished through physical barriers.

Sarvadi also said the citations are further evidence of OSHA’s aggressive enforcement stance under the Obama administration. Actually, OSHA administrator David Michaels said that the entertainment industry has been overlooked by the agency for many years. He now expects OSHA to hold entertainment employers to the same level of worker protection that other industries must meet.

COMMENT. Entertainment professionals should note that the first citation was for failing to guard a 10 foot 3 inch fall on the front sides of the left and right bridges and stairs leading to the stages in Shamu Stadium (1910.23(d)(1)(iii). This affirms OSHA's intent to include performers under their fall protection regulations. The first such citation was against the Atlanta Ballet for the hazard posed by the front lip of the stage. In this case, OSHA accepted special rehearsals and leading edge LED lights as the Ballet's fall protection program (*ACTS FACTS*, 3/09). In SeaWorld's citations, the access, not the stage itself was required to be railed. After seeing videos of performances, I think this is because there is water directly under the Shamu Stadium stages rather than a hard surface.

Another issue that should be addressed is SeaWorld's assertion that the trainers are zoological professionals, as if this gives their employer the right to expect them to take risks with animals. But are these trainings and performances really zoological science activities? Or are they circus acts?

These performances probably provide data similar to that which is obtained in training circus elephants or seals. Granted, the performances bring public attention to the plight of whales and most of the orcas in the show are well-behaved. Are audiences so jaded that they won't be satisfied until they have also seen human interaction with the one orca advertised as having been implicated in two deaths—and now three? These questions should be answered before another trainer is put in peril.

GUN RANGE CITED FOR \$2 MILLION IN OSHA FINES

SOURCE: *BNA-OSHR*, 40(34), 8-26-10, p. 720

According to the *Bureau of National Affairs*, the Occupational Safety and Health Administration said in a written statement on August 23 that it would seek to fine E.N. Range Inc., a Miami firearms range, for more than 50 violations of the federal lead standard and other violations for a total proposed penalty of \$2.09 million. Most of the fines were for failing to protect workers, most of whom speak little English, from lead exposure while they cleaned the firing range. The major source of lead in the range is dust created when bullets release a fine powder on impact.

The citation alleged E.N. Range did not use engineering controls to prevent its workers from being exposed to high lead levels, perform air sampling to determine the extent of worker exposure, provide showers for workers who had been exposed to lead, or provide blood testing to exposed workers every six months. These actions are required by the lead standard (29 CFR 1910.1025).

Other citations included violation of the respiratory protection standard for failing to provide medical evaluations and fit testing for respirators, failing to abate a previously cited violation for neglecting to implement a job rotation schedule to reduce lead exposures, a violation for a spliced electrical cable and failure to ensure the blades of a box fan were adequately guarded.

CHELATION. The company also allegedly violated the lead standard by prophylactically using chelating agents to reduce blood levels without medical supervision, the statement said. Moreover, the chelating agents used were not approved by the Food and Drug Administration, OSHA said.

Chelating agents are compounds that combine with metals to keep them from depositing in the body. Long term follow up studies have shown chelation of children does not reverse the damage caused by lead. Instead, chelation chemicals also have side effects of their own and may actually increase lead's effects on the brain and other organs. Most physicians no longer considered chelation an appropriate therapy except in a few limited instances and then only under medical supervision.

It is outrageous that E.N. Range would use the workers' limited education and knowledge of English to induce them to accept a phoney and inappropriate medical treatment in lieu of proper precautions.

RYOBI TO PAY 1.5 MILLION TO INJURED WORKER

SOURCES: *Woodshop News*, May 2010, pp. 11 & 15, plus letters to the editor in the July, August & September issues; & US District Court of Appeals June 8, 2010 Denial of Appeal.

If you work with wood and haven't heard about the "Ryobi Verdict," you've probably been comatose since last March when the verdict came down. Woodworking magazines and websites are full of articles, angry letters and posted comments. To see what the fuss is all about, it is first necessary to consider the history of SawStop®, a device which causes a table saw blade to stop in a fraction of a second once flesh is detected. SawStop essentially eliminates the risk of cuts and amputations.

SAWSTOP STORY. SawStop's patented blade-braking device was invented by Stephen Gass. Gass, a patent lawyer and an avid woodworker who holds a doctorate in physics, built a prototype for his device in 1999 out of a \$200 saw and electronic parts he had around his home. When the Oregon native showed his invention to his colleagues, David Fanning and David Fulmer, the patent lawyers were floored: "It seemed, for this industry, a fundamental discovery," Fanning said.

The trio unveiled the device at the 2000 International Woodworking Fair in Atlanta, stunning industry leaders with their demonstration on a hot dog. When they returned, they quit their jobs. Over the next few months, they met with several large power tool manufacturers, hoping to license their patented product. They won *Popular Science's* 100 Best New Innovations award. The Consumer Product Safety Commission awarded them the Chairman's Commendation.

Then, suddenly, the offers dried up. In 2002, Ryobi, a large manufacturer of saws, pulled out of a contract they had initially signed with SawStop. Manufacturers, interested at first, refused to license the device. Gass remembered they told him, "Safety doesn't sell." So, the trio decided to design their own line of saws, raising about \$3 million from friends, family members and strangers. Today, SawStop, has 40 employees worldwide and three saws on the market, priced from \$1,600 to \$5,000. Since 2004, the company has sold 20,000 units.

THE ACCIDENT. On April 19, 2005, 25-year-old Carlos Osorio of Malden, Mass., severely injured his fingers in a table saw accident while laying hardwood floors for his employer. Even after five surgeries and \$384,000 in medical bills, Osorio's hand is permanently fixed in one position due to two severed tendons. Osorio is a Columbian native who needed a translator during the trial.

THE TRIAL. Richard Sullivan, a Boston lawyer hired by insurance companies to handle workers' compensation cases, filed a lawsuit for Osorio in 2006 against Ryobi. Sullivan watched a CNN video of SawStop's demonstration and decided to take on the table saw manufacturers.

Last week, Osorio's legal team, which also includes the national firm Boies, Schiller and Flexner, pointed to SawStop's sales as evidence that the technology is not only mechanically feasible but financially viable. They asked for \$250,000 in damages, but the jury awarded Osorio, now age 30, \$1.5 million instead.

MORE LAWSUITS. There are many potential plaintiffs out there. According to the *Journal of Trauma*, an estimated 565,670 table-saw-related injuries were treated from 1990 to 2007 in U.S. emergency rooms. The vast majority involved a hand coming in contact with the blade, and about 10 percent ended in amputation.

Now, over 60 similar suits have been filed nationwide. They claim that the standard design of table saws, unchanged for decades, is defective. In addition, they claim manufacturers are negligent in failing to adopt a flesh-detecting technology like SawStop's, which has been on the market since 2004. Ryobi is the Defendant in about half of those suits.

THE ANGER. In a classic David versus Goliath story, SawStop's patented blade-braking technology challenges an \$8.6 billion power tool industry. So I can understand why the industry feels threatened. But why are so many woodworkers so angry? The answer is: "I don't know."

The letters complain that greedy SawStop and their lawyers are ruining our economy. But exporting SawStop's US patented technology could be a good thing or our economy. Eliminating thousands of medical bills wouldn't hurt our economy either. The letters often say Osorio should take personal responsibility own stupidity. These writers don't seem to care that this young man never worked with power tools before he took this job and he apparently didn't know enough English to have been properly trained. And how about Ryobi's stupidity in not honoring their contract with SawStop?

One angry writer reasoned that "hot dogs are not the same density as fingers with bones" and that he would have told Ryobi to make the SawStop owner prove the system works by sticking his own finger in the saw. The Editor of *Woodshop News* commented that Gass has done this at least twice, once for the *Time Warp* TV show. The video is on the internet (search for "SawStop finger video").

Finally, the September issue of *Woodshop News* publish three letters that were in favor of the verdict. There wasn't an angry word in any of them. I hope that, in time, these cooler heads will prevail.

EXPLODING BALLOONS INJURE UNIVERSITY STAFF MEMBER

<http://www.press-citizen.com/article/20100810/NEWS01/100810003/UI-staff-member-injured-in-hydrogen-balloon-explosion>, *Iowa City Press-Citizen*, Lee Heriston, staff writer, 8-10-10

A University of Iowa staff member who loaded balloons filled with hydrogen and a hydrogen-oxygen mix into a vehicle was injured when the balloons apparently exploded. According to the University of Iowa Police Department, Dale Stille filled eight balloons – four with hydrogen and four with a hydrogen/oxygen mix – and placed them in a Ford Explorer owned by the university.

Police said witnesses told them Stille had intended to take the balloons to an off-campus location for an educational activity. Stille is a coordinator for Hawk-Eyes on Science, an outreach program affiliated with the department of physics and astronomy. Stille puts on programs for school children doing scientific demonstrations, including exploding balloons filled with hydrogen and oxygen.

Police said when Stille opened a side door of the vehicle at about 7:30 am, there was an explosion. First he was taken to a local hospital and later he was transported to a larger hospital's burn unit. (Editor: no investigation is needed. Explosive gas mix + rubber + static electric discharge = boom.)

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES..

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor

181 Thompson St., #23

New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artsandcraftstheatersafety.org

COPYRIGHT: ACTS, September, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.

Canada & Mexico are \$28/year. Other

Countries are \$30/year. Checks must

be payable on US banks in US funds.

I enclose \$_____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

October 2010

Vol. 24, No. 10

TWO FAKE FIREARM ACCIDENTS FELL PERFORMERS ON STAGE

“Actor’s Injury Attributed to Misfiring of Prop Pistol,” Dave Itzkoff, *New York Times*, 10-4-2010; “Donmar Warehouse actor in hospital after being shot on stage,” Sam Jones, *The Guardian*, 10-4-2010
& BBC NEWS: <http://news.bbc.co.uk/go/pr/ft/-/2/hi/entertainment/8629369.stm>, 2010/04/19.

On October 2, 2010, performances of *Passion*, a musical by Stephen Sondheim, at one of London’s most critically acclaimed theaters, were suspended after an actor was shot in the eye with a replica gun during a scene. Actor David Birrell was taken by stretcher from the Donmar Warehouse theater.

A spokeswoman for the theater said in a statement on Monday, October 4: “Following initial inquiries into the accident at the theater on Saturday, it appears that during the duel scene in ‘Passion,’ David Birrell’s licensed replica stage gun misfired causing some debris to enter his eye. We are, as a matter of priority, carrying out further investigations into the incident. David is recovering well in hospital and is in good spirits.”

In April, 2010, actor Darrell D’Silva at the Royal Shakespeare Company required surgery after he was injured by a prop firearm during technical rehearsals of *Antony and Cleopatra*. The play’s press night was delayed by three weeks and the staging was adapted to accommodate D’Silva’s arm sling.

COMMENT: If this can happen in prestigious theaters with highly trained actors in a country with better safety laws than ours, we can see how dangerous combat scenes really are. Theater Arts Video Library has training videos on Firearm Safety Onstage, Armed Combat, Medieval and Elizabethan Weaponry (www.theatreartsvideo.com). These could be used as part of a combat training program.

NEW SAFETY EYEWEAR STANDARD: CONFUSION OVER AT LAST

ANSI Z87.1-2010 & *Lab Safety Newsletter*, 9/2010

Time and time again, I have seen people wearing eye protection on the job and had no way to tell if they were the right goggles or glasses. They all had the “Z87.1” mark on them indicating they were certified to have passed one of the American National Standards Institute’s tests, but which test? For example, a pair of glasses shaped like safety glasses with side shields which we could assume would protect the eyes from impact during machine work could really be glasses approved only for very low amounts of ultraviolet light from welding operations at a considerable distance.

The new ANSI Z87.1-2010 standard has finally made it possible to look at the markings on eyewear to determine exactly what they will protect against. Now all wear designed to resist impact will be marked with a + sign. There is no middle ground, it either is rated for high impact or it is not.

The lens or shield will also be marked for the type of light or radiation it will repel such as ultraviolet or infrared. And the use will be indicated. Goggles for protection against splashes and dust will also be identified. We now only need to check the codes on the eyewear. I suggest keeping a copy of the chart on the next page in the workplace to help interpret these marks.

PROTECTIVE EYEWEAR MARKINGS – ANSI Z87.1-2010

Type of protection	Description	Marking
Impact	Rated lens or shield	Z87+
	Rated lens-prescription	Z87-2+
Non-impact	Unrated lens or shield	Z87
	Unrated-prescription	Z87-2
Lens type	Clear	none
	Welding	W and Shade Number (range from 1.3-14—the higher the number, the darker the lens)
	UV filter	U and Scale Number (range from 2-6, the higher the number the higher the protection from UV)
	Visible light filter	L and Scale Number (range from 1.3-10, lower number provide greater greater protection.
	Infrared filter	R and scale number (range from 1.3-10, lower numbers provide greater Protection)
	Variable tint (darken in sun) Special Purpose	V S
Use	Splash/droplet protection	D3
	Dust	D4
	Fine dust	D5
Head size	Small sized frames and spectacles	H

HOW TO READ THE MARKS. Manufacturers of eyewear also must identify themselves. If we abbreviate that mark as “Mfg,” this mark must come first. Next must be the Z87 logo followed by the other marks. Some typical types of eyewear used in art and theater work might include:

Artists who are exposed to splashes of paints and solvents, dust, and impact on occasion should wear a goggle fitted to the face whose certifications would read: MfgZ87+D3D4.

Wood working requires eyewear in which both the frame and the lenses are marked and rated for high impact. If the lenses in those side-shielded spectacles were also prescription they would be marked MfgZ87-2+

Welding shields can also be rated for impact. A shield which also has a W shade of 5 and a UV rating of 3 would be marked MfgZ87+W5U3.

And when you are not sure of the meaning of the string of letters and numbers, the manufacturer’s mark can identify who to call to find out exactly what the eyewear will protect against.

DISCLOSURE OF ALL CLEANING PRODUCT INGREDIENTS: COURT SAYS “NO,” DEC SAYS “YES!”

ALM Media Properties, LLC. New York Law Journal, <http://www.nylj.com>. “Private Advocates Denied Right To Seek Detergent Ingredients,” Noeleen G. Walder, 08-03-2010; Press Release, Earthjustice, 10-09-2010, Kathleen Sutcliffe, Earthjustice; and *Pick Your Poison*, M. Rossol, Wiley & Sons, projected 2011 publication.

This story begins in New York State in 1970 when the legislature banned phosphates in detergents. Detergent companies were not happy about changing their formulas and claimed that it would be difficult to replace the phosphates quickly. They also told legislators that some of the replacement chemicals might even be more dangerous to people and the environment than phosphates! That sounded as if manufacturers were threatening to use more toxic substances if they were forced to give up the phosphates. Legislators countered by amending the act to require complete disclosure of all ingredients in cleaning products and to permit the commissioner of the Department of Environmental Conservation (DEC) to evaluate any new chemicals in detergents and set further restrictions on any ingredients found to be harmful to human health and the environment.

Finalized in 1976, regulation 6 NYCRR §659 specified that reports must be filed with the commissioner semiannually that must include the following information about each cleaning product: the amount of phosphorus; a list naming each ingredient present in an amount greater than 5 percent in the product, plus the percentage of that ingredient in the total formula; and the names of any ingredients in the formula occurring in an amount of less than 5 percent, with the exception of ingredients that are present only in trace amounts (under 1 percent). All ingredients must be identified by their generic chemical names, rather than by fanciful and confusing trade names.

The regulation also required disclosure of any investigations or research performed by or for the manufacturer concerning the effects of a substance on human health or the environment. All this information was to be placed in public record, available at the DEC offices in Albany, with the exception of legitimate trade secret ingredients. A further DEC amendment in 1985 banned a chemical solvent called nitroacetic acid, or NTA, that was shown to cause cancer in laboratory animals. It was limited to 0.1 percent or less in any cleaning product.

Unfortunately, this wonderful law was never enforced. No ingredient reports were actually filed. Then recently, a nonprofit environmental law firm called Earthjustice decided to reactivate this law. In September 2008, Earthjustice attorney, Keri Powell, contacted all of the major cleaning product manufacturers that sell products in New York, apprised them of the existence of the law, and requested them to comply by providing their complete lists of ingredients to the Department of Environmental Conservation as required.

Several companies, such as Method, Prestige Brands, Seventh Generation, Sunshine Makers, and Weiman Products, filed reports with the DEC. (I was fortunate enough to be in receipt of some of these reports and was amazed at the difference in certain products between the entire list of ingredients as required by New York law and the lesser numbers of ingredients listed on the labels or the material safety data sheets of these products. It clearly showed me that we need a law that requires complete ingredient disclosure.)

Then Earthjustice, representing a coalition of plaintiffs that included the Sierra Club and the American Lung Association, filed suit against the companies that refused to file reports with the DEC. These included Church & Dwight, Colgate-Palmolive, and Proctor & Gamble, as well as

British Reckitt Benckiser, Inc. On February 4, 2010, the petition was heard. During the court case, the detergent companies said they would file disclosure reports only if asked to do so by the State.

After thinking about it for 6 months, Supreme Court Judge Richard F. Braun, Jr., dismissed the petition on July 30, 2010. He decided that Earthjustice and the members of the other organizations bringing the suit, to have standing in this case, must have injuries that fall within the concerns the Legislature sought to prevent with the statute. He held that the petitioners' members suffered injuries no different than the public at large. The judge determined "the rights of the general public should be protected by officials of the executive branch" instead.

Earthjustice's lawyer intended to appeal, but it wasn't necessary. The "executive branch" decided to step up to protect the general public: DEC Commissioner Pete Grannis made that request for ingredient disclosure. He announced the agency's new policy in an invitation to a stakeholders' meeting on September 8, 2010. This first-of-its-kind policy could have national implications. Although the law is a New York State law, any company that sells their product in the state must comply and the ingredient information would be available to the public in the Albany DEC office.

MOVIE EXTRA IN A COMA AFTER STUNT ACCIDENT

FoxNews.com, 9-05-2010; Indyposted.com, 9-07-2010; dozens of other sites, *Transformer 3'* website & Facebook page for Gabriella Cedillo

A beautiful aspiring actress, Gabriella Cedillo, was working as an extra on location for a production called *Transformer 3'* in the Chicago suburb of Hammond, Indiana. She was asked to step in as a stunt person and was driving a car in a scene. A cable under tension snapped and shot through the windshield hitting her in the head. She was transported by helicopter to a hospital. At last report, she was still in a medically induced coma as she is recovering from brain surgery.

That was a month ago.* A search on the *Transformer 3'* website showed plenty of advance advertising for the movie, but no mention of her current condition. No press updates could be found using Google either. On a Facebook page set up by friends, the most recent entry was September 30 from someone asking the same question: "How is she?" There was no answer. If anything should convince you not to take risks, just think how quickly *Transformer 3'* got back to advertising and the press forgot all about this poor woman. Take care of yourselves.

* It is October 7. This newsletter is late. My husband was in the hospital after a mild heart attack. He's home & well.

ACTS FACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues. Canada & Mexico are \$28/year. Other Countries are \$30/year. Checks must be payable on US banks in US funds. I enclose \$ _____ for _____ year(s).

CREDIT: ACTS FACTS,

Monona Rossol, Editor
181 Thompson St., #23
New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

Name _____

Address _____

COPYRIGHT: ACTS, October, 2010

ISSN 1070-9274

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

November 2010

Vol. 24, No. 11

WHO SHOULD USE LEAD TEST KITS?

www.epa.gov/etv, <http://www.epa.gov/lead/pubs/kits.htm>, CPSC Staff Repor: Ecaulation of Lead Test Kits, David Cobb, Kristina Hatlelid, Bhavi Jain, Joel Recht, Lori E. Saltzman, October 2007

Although lead paint interior and exterior household paints have been banned by the US Consumer Product Safety Commission (CPSC) since 1978, there still are an estimated 37.8 million pre-1978 occupied housing units. This number does not include the vast number of warehouses, piers, schools, theaters, factories and other commercial buildings that also were painted with lead paints. In addition, there are an unknown number of abandoned buildings of this vintage, buildings that often are leased for movie locations, art studios or workshops.

Most people are also unaware that specialty paints containing lead were never banned. Metal priming paints, artists paints, boat and automobile paints, and many other coating products always have been, and still are, exempt from the lead paint regulations. Other sources of lead in homes and buildings include stained glass windows, some types of decorative metal work, lead caulking compounds around window panes or tiles, painted wall murals, painted furniture and cabinetry, old vinyl plastic wall paper and plastic window blinds, and much more.

How are we to know when lead is present in some or all of these old materials? Some organizations who can afford it purchase or rent RXF analyzers. These are \$30,000 to \$40,000 gun-like devices that shoot a beam of x-rays at a surface and provide a digital display of the percentage of lead it detects. Or people can take small samples of the paint, caulk or plastic to a lab for analysis. The labs usually charge from \$25 to \$100 per sample depending on what type of analysis needs to be done.

The inexpensive lead kits are another option. They can be purchased at hardware and home improvement stores and outlets. A 2007 study of these by the CPSC concluded they were not reliable enough. However, a more recent EPA evaluation of the kits has identified three that are adequate. A test kit can be EPA-recognized if it meets the negative response criterion of no more than 5 percent false negatives, with 95 percent positives for paint containing lead at or above the regulated level of 1.0 milligrams per cubic centimeter (mg/cm²) or 0.5 percent by weight. Three lead test kits when meet this criterion: LeadCheck®, the State of Massachusetts kit, and D-Lead®.

LeadCheck®. EPA recognizes that when used by a certified renovator, the LeadCheck® kit can reliably determine that regulated lead-based paint is not present on wood or ferrous metal (alloys that contain iron). This kit is not recognized for use on plaster and drywall. Contact Hybrivet Systems, Inc., call 508-651-7881 or e-mail Hybrivet at info@leadcheck.com.

State of Massachusetts. EA recognizes that when used by trained professionals, this test kit can reliably determine that regulated lead-based paint is not present on wood, drywall and plaster; it is not recognized for use on ferrous metal (alloys that contain iron). In other words, this kit could not be used on metal priming paints. These kits are not readily available nationally over the counter.

D-Lead®. EPA recognizes that when used by a certified renovator the D-Lead® Paint Test Kit manufactured by ESCA Tech, Inc., can reliably determine that regulated lead-based paint is not present on wood, ferrous metal (alloys that contain iron), drywall and plaster surfaces. Certified renovators seeking to use these kits can purchase it from certain distributors and retailers: visit www.esca-tech.com, or e-mail rrp@esca-tech.com or call 414-962-3006.

It's important to read these restrictions. For example, as an industrial hygienist and experienced lab chemist, it is EPA's opinion that I still shouldn't use a **negative** test result from one of these kits as proof that there was no lead in a particular paint. Only a certified lead abatement contractor or renovator should do that. It is one reason I almost always take samples to a certified laboratory for testing instead. But almost anyone can assume that a strong **positive** result from the kit is good evidence that lead is present. So these kits can be useful in situations where fast judgements must be made prior to more extensive testing, such as scouting film locations, or planning a renovation.

SATELLITE UPLINK DISHES

Editorial

Last month, a union official asked me about the safety of his workers in a shop near some large satellite dishes. Usually these dishes only receive signals and are not a hazard. But when he attached pictures of the massive dishes behind their shop, it was clear they are NOT receivers. Instead, these are satellite uplink dishes operated by a major cable company. They send a powerful beam of radio frequency waves and microwaves up to the satellites. Should you get directly in that beam, you'd be fried like microwave popcorn!

A cable company employee told the workers that because the dishes point skyward they were safe unless they could fly over the dishes into the beam! This is partly true. But like your microwave oven, these dishes can get out of whack and leak waves. The hazards of fugitive RF have been known since the 1980s when there were several cases of workers compensation for Alzheimer's-like brain damage from microwave exposure in telephone frame workers. And since 1997, the Federal Communications Commission (FCC) has required the cable company workers that maintain these dishes to wear radio frequency (RF) detectors--little box-shaped devices worn on their belts designed to detect, measure, and record exposures to escaping RF.

No matter how well-maintained, there will be some low levels of fugitive RF around the dishes. There is data supporting both sides of the question of whether this low level stuff is dangerous or not. Some studies say "yes," some say "no". The World Health Organization recently included RF among the physical hazards that need more research. They also concluded that the data on RF from your cell phone is strong enough for them to recommend reducing exposure of children to cell phones.

I looked into getting a monitor for the union workers' building, but it was not practical. One of the most difficult areas to monitor are areas in which there are many emitting dishes, some of which are operating at different frequencies. This was exactly the situation near this shop. The bottom line is there are two safety considerations here: 1) how well these dishes are maintained by the cable company, and 2) the absence of definitive data on how hazardous low level RF is to adults.

The workers do not have control over either of these issues. My advice for them is to remember that distance is their friend. The further they are from the source, the weaker the RF. I suggest they keep away from the dishes whenever possible. Plan to eat lunch and recreate somewhere else.

TRICK RELIGHTING TRICK CANDLES: USE WITH CARE

“Trick Candles,” Linda Wang, *Chemical & Engineering News*, Am. Chemical Society, August 9, 2010, p. 34
Almost everyone has seen them. The guest of honor blows out the candles on his or her birthday cake. A few seconds later, the wicks begin to glow. They flicker, and suddenly the flames reappear. And the candles will relight this way no matter how many times they are blown out.

HOW DO THEY WORK? The chemistry that allows these candles to reignite is surprisingly simple. Ordinary candles are typically made from paraffin hydrocarbons, and the wick is usually braided cotton treated with various trade secret chemical salt solutions to keep the wick from being destroyed too quickly by the flames. In a trick candle, magnesium powder is added to the wick.

Magnesium is a highly reactive metal when powdered or in thin wires. It ignites at temperatures as low as 800 °F. When the flame is blown out, the hot embers from the wick ignite the magnesium powder, producing tiny sparks. This, in turn, ignites the vaporized paraffin hydrocarbons, which relights the wick. Other metals such as aluminum or iron are also flammable, but only magnesium will catch fire at the very low temperature of a cooling candlewick.

MAKE YOUR OWN? Trick candles are so simple to make that video instructions are readily available on YouTube and other video-sharing sites. But experts caution that the simple fun of these candles belies their hazards. “We’re very concerned about these candles because of the potential fire hazard,” says Barbara Miller, a spokeswoman for the National Candle Association, in Washington, D.C. “People think the candles are done, so they take them out of the cake and throw them in the trash. Suddenly their trash is on fire.”

Miller recommends extinguishing the candles with water. “When I use the candles, I douse them in water and set them in my sink for an hour or two before I put them in the trash,” she says.

REGULATIONS. Canada has banned the sale and advertisement of trick candles since 1977. Trick candles are currently legal in the U.S., and they are typically manufactured in Asia. “I think it would be very difficult to ban them here in the U.S.,” says Miller. “Of all of the issues that people are dealing with in product safety, trick candles are way down on the list. Our best bet is to continually try to educate consumers about the potential fire hazards of these candles.”

WHO INVENTED THEM? Information on when trick candles were invented and by whom is difficult to track down, but there are several patents on the basic principle. For example, a 1983 Japanese patent titled “Self-Ignited ‘candle,” filed by inventor Toshio Takahashi, describes a candle fuse made of aluminum, magnesium, or iron, or an alloy of those metals. In a 2003 U.S. patent, Earl M. Stenger describes his invention of a wind-resistant candle that contains wick fibers made of a pyrophoric material such as magnesium or a magnesium-aluminum blend.

COLORED FLAMES? Inventors continue to experiment with novelty candles, including those that burn with colored flames. ACTS would not like to see these experiments result in a new product. Many of the metals that cause flames to turn colors are toxic and emit fine metal fumes on burning that can deposit on surfaces. Lead-cored wicks have been banned for this reason.

LIFT TOPPLES, KILLS YOUNG NOTRE DAME VIDEOGRAPHER

“OSHA Descends on Notre Dame After Student Death,” Associated Press, *NBC Chicago*, 10/28/10 - <http://www.nbcchicago.com/news/local-beat/notre-dame-lift-fall-106132208.html>; “United Rentals: Notre Dame scissor lift isn't ours, Staff Writer, Ed Semmler, *Chicago Tribune* 10/29/10; & “Many schools have safety policies for use of hydraulic lifts,” Brian Hamilton, *Chicago Tribune*, October 30, 2010.

The investigation by the Indiana Occupational Safety and Health Administration is just beginning and the newspaper accounts are sketchy. However, several aspects of the story are worth noting now.

THE ACCIDENT. Declan Sullivan, a 20-year-old junior at the University of Notre Dame and writer for the school newspaper for the last two years, was atop a scissors lift videotaping a football practice. A gust of wind toppled the lift, Sullivan fell 30 feet and died of his injuries at the hospital.

The university did not return calls from reporters so they could not find out who authorized Sullivan to go up in the lift or determine which company made the hydraulic lift. One manufacturer of these kinds of lifts, HHS Wire, says on its website that the lifts should not be used in winds above 25 mph. The National Weather Service said winds in the area were gusting to 51 mph at the time the scissor lift fell. In the moments leading up to the incident, Sullivan himself expressed fear of being in the lift, according to messages posted to his Facebook and Twitter profiles.*

EARLIER ACCIDENT. In December 2000, a scissor lift at Colorado State fell in high winds, and the football videographer suffered broken ribs, two punctured lungs and a liver injury. After that incident, Colorado State, the University of Nevada, and some other schools enacted a policies for manning lifts. These policies include insuring there is no pressure on individuals to go higher than their comfort levels and a prohibition to extend a lift higher than 30 feet under any circumstances.

COMMENT: There should be a written program and formal, documented training for users of scissors lifts. If the lift is power driven, it comes under the OSHA training and maintenance requirements of platform lift trucks (1910.178). If it is rolled into place by hand, OSHA expects that the manufacturer’s operations manual will be provided to users and it’s guidelines followed.

* http://www.huffingtonpost.com/ellie-hall/notre-dame-student-tweete_b_775123.html

ACTSFACTS sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many other publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce, Pat F. Sheffield; Staff: John Fairlie, OES.

ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations. ACTS takes no money from industry or any party having a financial interest in our opinions about art or theater products.

REPRINT TERMS: Free if unedited and with proper credits. Edited copy must be checked by ACTS.

CREDIT: ACTS FACTS,

Monona Rossol, Editor
181 Thompson St., #23
New York, NY 10012 - 212-777-0062

ACTSNYC@cs.com - www.artscraftstheatersafety.org

COPYRIGHT: ACTS, November, 2010

ISSN 1070-9274

SUBSCRIPTION FORM

US subscriptions are \$25/yr/12 issues.
Canada & Mexico are \$28/year. Other
Countries are \$30/year. Checks must
be payable on US banks in US funds.
I enclose \$ _____ for ____ year(s).

Name _____

Address _____

ACTS FACTS

THE MONTHLY NEWSLETTER FROM

ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

December 2010

Vol. 24, No. 12

OSHA FINES LINCOLN CENTER THEATER \$51,000

<http://www.mmdnewswire.com/osha-proposes-13762.html>, Region 2 News Release: 10-1625-NEW/BOS 2010-484,
& Brigid Bergin: WNYC producer, December 2, 2010

The Occupational Safety and Health Administration (OSHA) proposed \$51,000 in fines against David H. Koch Theater in New York for asbestos, fall and crushing hazards. The OSHA inspection of the theater was prompted by worker complaints. The theater, located in Manhattan's Lincoln Center for the Performing Arts, is home to the New York City Ballet and the New York City Opera. According to OSHA's December 2nd press release:

OSHA's inspection found that employees of the theater and of outside contractors had not been informed of the presence of asbestos-containing and potentially asbestos-containing materials in the theater's promenade area and in nearby electrical closets. The materials had not been labeled and asbestos warning signs had not been posted.

In addition, an exit door was stuck and unable to be used, and a portable fire extinguisher was not mounted. As these conditions were similar to those cited by OSHA during a 2009 inspection of the theater, they resulted in the agency issuing the theater four repeat citations with \$45,000 in proposed fines. A repeat violation is issued when an employer previously has been cited for the same or a similar violation of a standard, regulation, rule or order at any other facility in federal enforcement states within the last five years.

"The recurrence of these conditions is disturbing," said Kay Gee, OSHA's Manhattan area director. "For the health and safety of its employees as well as outside contractors, the theater must take effective steps to identify and permanently eliminate these and other hazards identified during this latest OSHA inspection."

OSHA also found that, due to a lack of guarding, theater employees were exposed to falls into the orchestra pit when the stage was raised above the pit, and to being struck or crushed by the stage when it descended into the pit. These conditions, plus the use of temporary wiring in place of permanent lighting in the promenade area, resulted in OSHA also issuing the theater three serious citations with \$6,000 in proposed fines. A serious citation is issued when there is substantial probability that death or serious physical harm could result from a hazard about which the employer knew or should have known.

"One means of eliminating hazards such as these is for employers to establish an illness and injury prevention program, in which workers and management jointly work to identify and eliminate hazardous conditions on a continual basis," said Robert Kulick, OSHA's regional administrator in New York.

The theater has 15 business days from receipt of the citations and proposed penalties to comply, request an informal conference with OSHA's area director or contest the findings before the independent Occupational Safety and Health Review Commission.

COMMENT: ACTS was happy to see that OSHA is continuing to cite for orchestra pit fall hazards. This obvious hazard has been unaddressed for years. It is likely that when the Koch theater was built, architects and consultants assumed that fall protection and crush protection were not needed for the orchestra pit hydraulic lift system. Today, good theater consultants recommend drop-in rails at the lips of stages and guarding for the pit at all levels at which it can be set.

Failure to address asbestos hazards that are so common in theaters built before 1980 is disturbing. It's especially sad to see these violations at such a famous theater and learn they were cited for the some of the same violations previously.

Complying with asbestos regulations are not very difficult. First, employers must survey all potential sources of asbestos in the building and write an OSHA/EPA management program. If the employer doesn't have a budget for testing all of the pipe insulation, old vinyl tiles, acoustic wall treatments, fire curtains and so on, they can consider them to be "presumed asbestos containing materials" or PACM. Insulated pipes should be labeled either as PACM if untested, or as asbestos containing material (ACM) or as asbestos free if they have been tested and determined to be so.

The employer also must ensure that contractors and employees know which materials are asbestos-containing or suspected to be asbestos-containing and instruct them to avoid disturbing them and to report immediately any accidental damage of these materials.

WAS FAMOUS POTTER, CAROL JANEWAY, LEAD POISONED?

<http://books.google.ca/books?id=30kEAAAAMBAJ&lpg=PA12&ots=fHUQPzymi-&dq=carol%20janeway%20life&pg=PA12#v=onepage&q&f=false> & personal correspondence with author Victoria Jenssen

Victoria Jenssen, a writer, art historian, and adjunct professor of art history at Bard College in Great Barrington, Massachusetts, is writing a book about an amazing potter named Carol Janeway. Janeway burst onto the ceramic scene on August 25, 1942 when the *NY World Telegraph* ran an article and a captioned photograph showing Carol working on a wrought-iron table inset with decorated ceramic tiles. By February 1942, Georg Jensen Inc., the prestigious Fifth Avenue giftstore, had placed its first order for her hand-painted tiles. For the next eight years, Georg Jensen sold her tiles and ceramic wares in their showrooms, through their catalogs, and, in 1945, from a showroom called the "Janeway Corner."

Soon other firms including Altman's, Gimbel's, Macy's in New York, Gump's in California, and other major outlets carried her line. Janeway's items included tiles, tables, trays, plaques, bookends, chessboards and sets, buttons, jewelry, jamjars, mugs, doorknobs, paperweights, and more. Between 1943 and 1949, her work was exhibited in museums and galleries including the Museum of Modern Art, the Metropolitan Museum, Cooper Union Museum, America House, the American Museum of Natural History, the Brooklyn Museum and the Julien Levy Gallery. She was also commissioned through Wedgwoods's New York office to decorate 12 prototype plates for Josiah Wedgwood.

She was an incredibly photogenic ex-model who received copious press coverage in the 1940s. Stories can be found in *The New York Times*, *New York Herald Tribune*, *New York Sun*, *New Yorker* magazine, *Life*, *Newsweek*, *McCall's*, *House Beautiful* and many other publications.

HER DECLINE. By 1949, her business was not doing well. She was having problems with the kilns in a new studio she had moved to. Her lover, Russian sculptor Ossip Zadkine, left her in 1945 and according to her, some of the commissions left with him. She was also drinking heavily, exhibiting erratic behavior, and talking about suicide which she blamed on the departure of Zadkine.

On February 6, 1950, *New York Post* columnist Leonard Lyons reported on her retirement and cited lead-poisoning from her work as the cause. Janeway's dentist had noted changes in her teeth. He probably saw the well-known blue line on the gums that is typical of chronic lead exposure.

LEAD POISONING or lead intoxication is almost certainly part of this story because Janeway worked, lived, and ate in her studios from 1941 to late 1945. In 1950, Janeway published a book called *Ceramics and Pottery-making for Everyone* in which she was pictured spraying glaze on tiles with a Flit (insecticide) sprayer without a booth or mask. And she was probably using her own lead-glazed ware for eating and drinking and still made pottery occasionally at home in a small kiln.

As part of the research for her book on Janeway, Victoria Jenssen had some original Janeway pieces tested with an RXF analyzer, a gun-like instrument that can measure lead and other metals by shooting a beam of xrays at the object without damaging it. The tests showed that lead was the major ingredient in all the ware.

In 1989, Carol was diagnosed with mouth cancer. Soon after, she was hospitalized for pneumonia and died just before Thanksgiving. Janeway also reportedly said she had TB, which was never confirmed. However, both pneumonia and TB are common complications of silicosis.

Lead intoxication is consistent with her erratic behavior, irritability and emotional instability, short term memory loss, and inability to concentrate which may have at least exacerbated her financial difficulties. Janeway is probably another instance in which toxic art materials were responsible for ill health and perhaps even the death of an artist.

FOR COLLECTORS. Many Janeway works are in private collections and pieces can turn up at internet and garage sales. To see examples of her work, go to "google books" and search for the terms: "carol janeway life." Or go directly to the long website listed under the title of this article. If this is too long to type in, email me at asctnyc@cs.com and I'll send you the link to paste in.

STRAIGHT TALK ABOUT BLEACH

Editorial

ACTS has noticed that many advocates for "green" products counsel people to replace bleach with other more environmentally friendly disinfectants instead, such as vinegar and alcohol. Another strategy suggested by some is to visit the websites of the Centers for Disease Control or the Environmental Protection Agency and follow their recommendations to choose disinfectants that target specific pathogen such as MRSA, HIV, TB, e-coli, and the like.

However, in homes or schools, there may be scores of different pathogens none of which are likely to be identified. For this reason, bleach is still the Center for Disease Control's highest recommended all-round disinfectant. And it also has the advantage of being cheaper than most other disinfectants.

Bleach should not be over-used because its chlorine can react with some environmental substances to form toxic chlorinated hydrocarbons. The gases it releases are also corrosive to the respiratory system, so care should be taken to provide some ventilation during use. These precautions aside, ACTS suggests that every household and school have bleach available for those times when the task calls for a broad spectrum disinfectant such as when cleaning up body fluids or animal waste.

INDEX TO 2010 (VOL. 24, No.s 1-12)

January

24 YEAR ANNIVERSARY OF ACT FACTS
HISTORY REPEATS: NIGHTCLUB FIRE IN RUSSIA KILLS 152
REFORM OF THE MSDS IS COMING
MSDSs today, the Purple Book, Definition changes, OSHA proposed rule.
ANTHRAX ASSOCIATED WITH ANOTHER DRUM EVENT

February

POTASSIUM CHLORATE EXPLOSION INJURES 8 IN HIGH SCHOOL
What is potassium chlorate? Printmaking sources
SMITHSONIAN WORKER'S ASBESTOS CASE FINALLY SETTLED
The story, Whistleblowers protected? Last resort: the Press, Lessons
ANTHRAX DRUM UPDATE: AP Wire
E-CIGARETTES: ART THEY A FIRE HAZARD?

March

DIANA BRYAN: ARTIST, BOARD MEMBER DIES
SMITHSONIAN WAREHOUSE COLLAPSES
PRO WRESTLER SINGED BY PRYOTECHNICS
PALLETS (chemical treatments of wood causing Tylenol recall)
LOCOWEED STEW FELS FAMILY
UPDATE: DISNEY SETTLES WITH OSHA
SMALL LAB FIRE: BIG LESSONS (upholstered chair in lab)

April

MONTREAL SCHOOL DISTRICT BANS "GREEN" CLEANERS
DETERGENTS MAKE GOOD BLACK LIGHT PAINTS
BAKER'S ASTHMA REFERENCE
CANADIAN TEEN ARRESTED FOR LASER ASSAULT
FDA ALERT ON TEMPORARY TATTOO PRODUCTS
GLASSBLOWING SANITATION QUESTION (shared blowpipes)
ACTS FACTS LATE: EDITOR WAS IN AMSTERDAM!

May

MANKATO, MN: SCHOOL DIST. EARNS OSHA CERTIFICATION
CALIFORNIA SCHOOL DISTRICT TO PAY \$750,000 HAZMAT FINE
OSHA PROPOSES \$130,800 FINE FOR WOODWORKING SHOP
WESLEYAN STUDENT STABBED BY SAMURAI SWORD (stage accident)
SACCHARIN TO COME OFF HAZARDOUS WASTE LIST?
GARY NULL NEARLY KILLED BY HIS OWN PRODUCT

June

FIREWORKS REGS HELP CATCH TIMES SQUARE BOMBER
LEED PROGRAM FOUND FLAWED
FIRE RETARDANTS AGAIN LINKED TO BRAIN DAMAGE
Brominated fire retardants, the study, findings, comment
GRINDING OPERATION STARTS MILLION-DOLLAR FIRE

July

OSHA SAYS SMALL FINES PROMOTE LAX SAFETY PRACTICES IN
THE ENTERTAINMENT INDUSTRY
POWDERED ALUMINUM AND IRON OXIDE CAUSE EXPLOSION
THIS EDITOR WRITES LETTER TO THE EDITOR OF C&EN
HAIR DRYER PROPOSED FOR THE "SUBSTANTIAL PRODUCT
HAZARD" LIST

August

TWO BILLS FOR SAFER CHEMICAL POLICIES INTRODUCED
Aren't chemicals already tested? What's wrong with TSCA? The burden
of Proof, The House and Senate Bills.
OFF CAMPUS HOUSING FIRE HAZARDS

September

OSHA PROPOSES \$75,000 FINE AGAINST SEAWORLD IN WHALE
TRAINER'S DEATH SeaWorld responds, Industry Lawyer's questions
GUN RANGE CITED FOR \$2 MILLION IN OSHA FINES
RIOBI TO PAY \$1.5 MILLION TO INJURED WORKER
The accident, The trial, More lawsuits The anger
EXPLODING BALLOONS INJURE UNIVERSITY STAFF MEMBER

October

TWO FAKE FIREARM ACCIDENTS FELL PERFORMERS ON STAGE
NEW SAFETY EYEWEAR STANDARD: CONFUSION OVER AT LAST
Protective eye wear markings-ANSI Z87.1-2010, How to read the marks
DISCLOSURE OF ALL CLEANING PRODUCT INGREDIENTS:
COURT SAYS "NO," DEC SAYS "YES!"
MOVIE EXTRA IN A COMA AFTER STUNT ACCIDENT

November

WHO SHOULD USE LEAD TEST KITS?
LeadCheck®, State of Massachusetts, D-Lead®
SATELLITE UPLINK DISHES
RELIGHTING TRICK CANDLES
Make your own? Regulations, Who invented them? Colored flames?
LIFT TOPPLES, KILLS YOUNG NOTRE DAME VIDEOGRAPHER
The accident, Earlier accident, Comment

December

OSHA FINES LINCOLN CENTER THEATER \$51,000
WAS FAMOUS POTTER, CAROL JANEWAY, LEAD POISONED?
STRAIGHT TALK ABOUT BLEACH
INDEX TO VOLUME 24 (issues in 2010)

Editor: Monona Rossol; Research: Tobi Zausner, Sharon Campbell,
Robert Pearl, Brian C. Lee, Pamela Dale, Kathy Hulce, Ted Rickard, Pat
Sheffield; Staff: John S. Fairlie, OES

COPYRIGHT: ACTS, December, 2010 ISSN 1070-9274

REPRINT TERMS: Free if unedited, with proper credits and a
file copy sent to ACTS. Edited copy must be checked and
approved by ACTS prior to publication.

CREDIT: Reprinted from *ACTS FACTS*, Monona Rossol,
Editor, 181 Thompson St., # 23, New York, NY 10012-2586.
E-mail:ACTSNYC@cs.com

SUBSCRIPTION: \$ 25.00 US for a one year subscription
(12 issues). Canada and Mexico subscriptions are \$28.00. All
other country's subscriptions are \$30.00. Payments must be in
US dollars drawn on a US bank or a postal money order.
There is a \$5.00 charge for invoicing.

Name _____

Address _____
