

## News & Notes

### THE BIG BANG

Chemicals can be dangerous in many ways. One of those ways is the capacity of some chemicals to produce dangerous reactions. Quite a few chemicals can react with other chemicals when they're mixed together. For example, when some acids are mixed with caustic substances, the mixture can produce heat, spattering, or a kind of eruption.

Maybe you remember the high school demonstration of a volcano erupting by mixing vinegar (acid) with baking soda (caustic), which caused foam to spew out of the paper maché volcano? Other possible reactions between chemicals include explosions and the release of toxic gas.

A few chemicals can also burn or explode if exposed to air—for example, powdered sodium, powdered potassium, and white or yellow phosphorus. Other chemicals can produce a lot of heat, burn, explode, or release toxic gases if exposed to water—for example, concentrated sulfuric acid, calcium carbide, and calcium oxide.

**So be very careful before you mix any chemicals.** Even chemicals that are harmless by themselves could be hazardous when mixed. Check the material safety data sheet for information about reactive hazards or ask your supervisor.

### WHO'S WATCHING YOUR BACK?

Whenever you perform any task that's particularly hazardous, it's a good idea to have a buddy to watch your back. Team up with an experienced co-worker to help one another keep safe.

### Can you identify the hazards?



(Wikimedia photo 2013)

Answers on page 2 Safety Bits & Pieces

### RIDDLES OF THE MONTH

- 1) What's the best day of the year to monkey around with your friends?
- 2) Why is spring a great season to start a gardening business?
- 3) What did the big flower say to the little one?
- 4) How is the letter A like a spring flower?

Answers on Page 2 Safety Bits & Pieces

# Safety Matters

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## Levels of Protection

### Use the right Personal Protective Equipment (PPE) for emergency response

There are four basic levels of PPE for emergency response to such incidents as chemical spills, fires, and other highly dangerous situations when people need to be sent in to control the situation.

1. **Level A** protection is required when the risk of exposure is greatest. Level A requirements would apply in areas with toxic vapors or gases or for initial surveillance of an unknown but thought-to-be-highly-hazardous area. This level requires the highest level of respiratory, skin, and eye protection. Examples of Level A protective equipment include a fully encapsulated chemical- and vapor-protective suit and positive-pressure self-contained breathing apparatus (SCBA).
2. **Level B** protection is required when the highest level of respiratory protection is necessary, but a lesser level of skin protection is needed. Examples of Level B protection include positive-pressure, full-face SCBA or positive-pressure supplied air respirator with escape SCBA. In addition, inner and outer chemical-resistant gloves would be required along with a face shield, hooded chemical-resistant clothing or coveralls, and chemical-resistant boots. This level is necessary for any site *thought* to be contaminated.
3. **Level C** protection is required when the concentration and type of airborne substances are known, and it is safe to use an air-purifying respirator. Examples of Level C protective equipment include a full-face air-purifying respirator, inner and outer chemical-resistant gloves, hard hat, escape mask, and disposable chemical-resistant outer boots.
4. **Level D** is the minimum protection required. Level D protection is sufficient when there are no contaminants present or when the work operation will not create the potential for splashes, immersion, or inhalation of hazardous levels of chemicals. Examples of Level D protective equipment include gloves, coveralls, safety goggles, face shields, and chemical-resistant steel-toe boots or safety shoes.

### SAFETY TIPS OF THE MONTH

With warmer weather remember these general personal safety tips:

Avoid walking alone at night unless absolutely necessary.

Avoid shortcuts and dark, isolated areas.

Walk purposefully, know where you are going, and project a no-nonsense image.

Always lock your car and take your keys with you.

Take all you cellular phones, laptops, purses, and book bags with you. Do not leave them in the car.

Close all windows, car thieves have tools to get into a vehicle through the smallest opening. Always park in a well lit area and well traveled area.

## Safety Bits & Pieces

### HOME PRESURE WASHER SAFETY

Before walking into a home improvement store and buying a home pressure washer please consider the size and how you will use it.

Think of home pressure washers in the same category as chain saws, brush cutters and other commercial equipment. Here are some of the psi ratings sold:

1,200-1,500 psi: An electric unit that's good for household and automotive cleaning jobs.

1,500-2,000 psi: A moderate strength unit used for jobs like deck cleaning. It comes in gas or electric.

2,200 to 3,500 psi. A high pressure unit for jobs like cleaning concrete and siding, usually gas powered.

Higher ratings, up to 50,000 psi, are for industrial uses. The higher it is, the more quickly a job can be done.

Safety recommendations:

- Always read the manufacturer's instructions before using the machine.
- Wear protective clothing: goggles, boots, coveralls and ear plugs for high psi units. Never wear a bathing suit.
- If you will be using chemicals, wear a mask so you don't inhale them.
- Before starting a job, check every part of the pressure washer to make sure everything is in working order. Check the oil level and the electric cord.
- Keep electrical connections out of the water.
- Make sure nozzles, wands and spray tips are free of clogs. High pressure can propel clogs, resulting in injuries or property damage.
- Start the job at low pressure and increase it gradually.
- Never point the nozzle at anyone.
- Have someone working with you if you will be working on a ladder. Or use a telescoping wand.

Clean the equipment after use. Run clear water through the system if you used chemicals.

### HAZARD IDENTIFICATION ANSWERS:

- 1) Spills are not properly addressed
- 2) Pallets are stacked in the walkway
- 3) Pallets are incorrectly stacked
- 4) The buffer cord is a tripping hazard
- 5) No warning signs are posted regarding the hazards
- 6) The maintenance person is not wearing any Personal Protective Equipment (PPE)
- 7) Hazard Identification training and application is non-existent
- 8) Everyone appears to be looking straight ahead; no one is paying attention to their walk path

### RIDDLES OF THE MONTH ANSWERS

- 1) APE - ril Fools Day, of course
- 2) Because it's the season when you can really "rake" in the cash
- 3) "You're really growing bud!"
- 4) Both are followed by bees (B's)!

## Step It Up

Protecting your feet at work involves more than safety shoes and watching where you're going. You also need to keep your feet in good shape and treat them right so you don't wind up with workplace-caused foot problems.

Even if your feet aren't exposed to particular dangers on the job, they still do a great deal of work for you and can develop a variety of skin, joint, and toe problems. Take these steps to prevent problems:

- **Wash feet daily** with soap. Rinse and dry them thoroughly, especially between the toes.
- **Trim toenails straight across** and not too short. Do not cut into the corners.
- **Wear clean socks or stockings** and change them daily.

In addition, if your feet sweat a lot, avoid potential problems with these tips:

- **Wear shoes made of leather or canvas**—not synthetic materials.
- **Have more than one pair of shoes** and rotate them daily to allow them to air out.
- **Use foot powder.**
- **Wear noncolored wool or cotton socks** since dyes may cause or aggravate skin allergies.
- **See a doctor for persistent ingrown toenails**, calluses, corns, fungal infection, and more serious conditions such as flat feet and arthritis.

### ON THE LIGHTER SIDE...



"We like the job you're doing, but we were wondering if you could switch up the ringtones from time to time."

### QUOTATION OF THE MONTH

Making a decision usually means taking one of two roads. One is doing the right thing. To take the other road, you have to sit back and spin a story around it. If you find yourself thinking up justification for what you are doing, you are not doing the right thing.

Monica Ricci, organizing and productivity expert



## From the State of Delaware's Office of Highway Safety... Get the Facts about Cell Phones

Did you know that over 35,000 cell phone citations have been issued since Delaware's hands free cell phone law went into effect in 2011? For some, using a cell phone, smart phone, or other electronic device is part of daily life. We depend on this technology not only for communication, but for a variety of other reasons that make it difficult to put it down, even for a short period of time. But there is risk involved with being distracted while you are behind the wheel.

OHS would like to remind you that using a cell phone or other device while driving is dangerous and may have deadly consequences. Consider these facts about crashes related to cell phone use:

- 55% are caused by a person under the age of 30.
- Males account for 55% of crashes and females 45%.
- Fridays have a much higher number of cell phone related crashes than any other days.
- Data shows that cell phone related crashes increase around lunch time and between 1 – 2 am, when bars close.

Delaware has primary laws that prohibit drivers from texting, or using handheld cell phones while driving unless they employ a hands-free device. Having a "primary law" means that an officer can ticket the driver for the offense without any other traffic violation taking place. Since the average fine is over \$100, it is best to turn off the phone and put it away until you have reached your destination. If you need to make a call or send a message, pull off the road to a safe location.

Remember, if you have a cell phone in one hand, you may have a ticket in the other.

For more information about Delaware's cell phone law, see [www.ohs.delaware.gov/cellphone](http://www.ohs.delaware.gov/cellphone). You can also find more information about distracted driving at [www.distraction.gov](http://www.distraction.gov).

**Drive Safe. Arrive Alive DE.**