



*Environmental Health
Safety*

Guardian

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EHS

Department

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Please recycle this newsletter when finished.



Fluorescent Light Fixtures: Be in the *KNOW*

Across our communities there is a desire to promote sustainable living practices in our homes and at the workplace. One of the easiest steps that can be taken is switching from traditional incandescent light bulbs to compact fluorescent light bulbs (CFLs). Making this simple change is a sustainable step to reducing the amount of electricity used in our homes and businesses. Lighting accounts for almost 20% of the average home's electric bill. ENERGY STAR qualified CFLs use up to 75% less electricity than an incandescent light bulb and last up to 10 times longer. The switch to CFLs will provide a quick return on your investment with little up front cost.

According to the Environmental Protection Agency (EPA), if every home in our country would replace just one incandescent light bulb with an ENERGY STAR qualified CFL; it would save enough energy to light more than 3 million homes in a single year. More importantly, CFL use would prevent the release of greenhouse gas emissions that contribute to global climate change, equal to the emissions of 800,000 cars.

The Issue of Mercury

The U.S. is responsible for the release of 104 metric tons of mercury emissions each year. Most of these emissions come from coal fired electric power plants. Mercury released into the air is the main contributor to mercury contamination in water that bio-accumulates in fish. The eating of fish contaminated with mercury is the main route for human exposure to mercury.



CFLs, as with all fluorescent light fixtures, contain a small amount of mercury sealed within the glass tube. Most of the mercury vapor inside a fluorescent light bulb becomes bonded to the inside of the bulb as it is used. The EPA estimates that the remaining mercury in the bulb, about 11%, is released into the air or water when it is sent to a landfill. Since the production of electricity is the main contributing source for U.S. emissions of mercury, the use of CFLs reduces the overall amount of mercury that enters the environment.

Recycling is the KEY

Fluorescent light bulbs can be recycled; the mercury vapor in the light bulb can be reclaimed and reused. Fluorescent lights are a specific type of

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Camp Insurance

We would like to take this opportunity to remind all departments that participate in academic camp programs that insurance is required for campers attending these camps. The Camp Insurance Request Form is available on our website (see below for web link) and should be submitted as soon as it is known that coverage is needed. Please submit the Camp Insurance Request Form to Mary K Parker at mparker@admin.fsu.edu.

For departments interested in providing camp insurance, the rate is \$0.30 per day per camper (day camp or overnight stay). The camp insurance policy only provides coverage for accidental death and accidental medical expenses. An accident is defined as an unexpected happening causing loss or injury which is not due to any fault or misconduct on the part of the person injured. Questions? Please call us at 644-7683. Access to roster form: www.safety.fsu.edu/forms/CampRequestForm.doc

Fear Not the Sprinkler!

We've all pretty much seen it on TV or movies. A person is sneaking a cigarette, or their cookie baking experience goes terribly wrong and there is smoke. The smoke curls to the ceiling followed moments later by an alarm. Suddenly the ceiling erupts in a cascade of falling water, then more, then even more! The whole room and soon floor fill with water. Every sprinkler head in the building is spewing forth gallon after gallon of water.

Ah, Hollywood: always the drama over truth, even if the drama does make people afraid to have sprinklers in their building. The truth is sprinklers don't perform that way. How, might you ask, do they work?

If Bill Nye the Science Guy is to be believed, then heat, like from a fire, rises. As the heat rises, it collects near the ceiling and comes in contact with the sprinkler head. Now if you look at the sprinkler head you'll notice a glass filled vial or a metal disk. This vial or

disk is designed to fail or melt at a specific temperature. The most common activation temperature is 155-165



degrees F. When the vial/disc fails, it drops and allows a plug in the sprinkler head to also drop and allows the water to flow. The flowing water hits the star shaped device on the sprinkler head and deflects the water into a spray pattern. Only heat or physical abuse (do not use a sprinkler head for a piñata) can

activate the sprinkler: not smoke, not the fire alarm going off, not a villain in some master control booth. It's that simple. Oh, it is also Hollywood drama when all the sprinklers go off at the same time! No, each sprinkler head has to be individually heated just like the one over the initial fire. So sprinklers are quite effective: only one sprinkler head is initiated 95% of the time in fires in buildings where sprinkler systems are installed. The National Fire Protection Association has no record of a multiple death fire

in a completely sprinklered public assembly, educational, institutional or residential building where a sprinkler system was properly operating. So when you see a sprinkler head in your building know that you are being protected by one of the simplest, yet most effective fire control devices developed.

Electronic Data Processing Equipment (EDPE) & Scientific Equipment Coverage is Available to All Departments

As we begin the fall semester, now is the time to consider the insurance products available to help protect your department. This semester, we are focusing on electronic data processing equipment and scientific equipment.

The State of Florida Department of Management Services (administrative agency for Florida governments) provides insurance access to FSU for electronic data processing equipment, electronic media including converted data, scientific equipment and medical equipment (excluding waterborne equipment) owned by the University and

similar equipment of others in the University's care, custody, and control (subject to underwriting approval). This equipment is covered while in transit and at

temporary locations for the full value of the covered item. Non-owned items are covered against "all risks" of direct physical loss (including computer viruses), except as excluded in the specific policy. Owned items are covered against limited perils not covered by the State Risk Management Trust Fund. For additional information, please contact the Insurance & Claims Manager at the Department of Environmental Health & Safety at 644-7683.



The fee for EDPE coverage is very cost

effective. The current rates for coverage types and deductibles are listed to the left. The Department of Management Services is able to provide the University with discounted rates because of the amount of equipment already insured by other state agencies.



Electronic data processing equipment and electronic media

Owned Equipment:	Non-owned Equipment:
\$0.08 per \$100 of Value	\$0.2375 per \$100 of Value

Scientific and medical equipment

Owned Equipment:	Non-owned Equipment:
\$0.19 per \$100 of Value	\$0.50 per \$100 of Value

Deductibles

Owned Equipment:	Non-owned Equipment:
\$500.00 for losses under \$10,000.00	\$2500.00
\$2,500.00 for losses \$10,000.00 and more	

Making Your Computer “User-Friendly”

The explosive growth in the use of computers over the last 25 years has led to a special group of ergonomic dilemmas unique to their use. For instance, the screen introduces new lighting and vision considerations. Many computer jobs offer few opportunities for alternate activities or postures, and, thanks to the fluidity of computer keyboards, workers can key for long uninterrupted stretches.

In addition, some people who use computers are concerned about the effects of heat and electrostatic and electromagnetic fields in the immediate vicinity of their terminals. Working at a computer is also sometimes associated with psychological stress, either because of the technology itself or because of job conditions (such as monitoring) associated with the work. By following the recommendations below, computers can be time-saving and labor-enhancing devices and not potential “pains in the neck.”

Posture is Important

To understand the best way to set up a computer workstation, it is helpful to understand the concept of neutral body positioning. This is a comfortable working posture in which your joints are naturally aligned. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system and reduces your risk of developing a trauma disorder. The following suggestions are important considerations when attempting to maintain neutral body postures while working at the computer workstation:

- Hands, wrists, and forearms are straight, in-line and roughly parallel to the floor.
- Head is level or bent slightly forward, forward facing, and balanced. Generally, it is in-line with the torso.
- Shoulders are relaxed and upper arms hang normally at the side of the body.
- Elbows stay in close to the body and are bent between 90 and 120 degrees.
- Feet are fully supported by the floor, or a footrest may be used if

the seat height is not adjustable.

- Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.
- Thighs and hips are supported by a well-padded seat and generally parallel to the floor.
- Knees are about the same height as the hips with the feet slightly forward.

Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day by making small adjustments to your chair or backrest and by stretching your fingers, hands, arms, and torso.

Back problems are a common complaint during the prolonged use of computer terminals. Poor posture (held for long periods), poorly designed work areas, poorly adjusted chairs, and sustained activity without breaks can all contribute to varying amounts of back, shoulder, and neck pain.

Although your own work habits can contribute to back and shoulder pain, using good posture is not a simple matter of finding the “right” position in which to sit. Even “poor” postures (feet up on chair rungs, slumping, twisting your body into odd positions) can prove comfortable if you don’t remain in them for extended periods of time. In fact, shifting about periodically actually proves useful for many people.

Ergonomic specialists recommend the following changes to your behavior and work environment to avoid back, neck, and shoulder pain:

- Change your body position periodically throughout the day.
- Use a document stand to reduce the amount of neck twisting or bending forward if typing from a source document.
- Position your keyboard directly in front of you and at approximately elbow height. This should enable you to type with straight wrists. If this is not possible with the keyboard atop the work surface, use an adjustable-height keyboard tray.

Tidbits

- Albert Einstein stated “If we knew what we were doing, it would not be called research, would it?”
- More people die AFTER tropical storms or hurricanes than during them.
- Winds of 50mph can flip over an ambulance. Emergency responders stop answering calls at these wind speeds.
- As little as 6 inches of moving water can float a vehicle. Turn around, don’t drown.
- Wooden ladders should be treated with transparent non-metallic paint that allows the grain to show.
- The following wording should be visible at the starting control point of self-propelled mowers: “Caution. Be sure the operating control is in neutral before starting the engine.”
- Carbon monoxide poisoning from improper generator use is becoming one of the largest killers after a tropical storm or hurricane.
- All solvents present some form of health hazard unless proper precautions are taken. You should only use solvents which have an approved Material Safety Data Sheet (MSDS).
- October is National Fire Prevention Month. Plan and practice your home evacuation this month!
- Smoke detectors are one of the best early warning fire alarm devices. Remember: the best device can not do its job if it is disabled or without batteries.
- Non-construction laborers rank number one for occupations with the largest number of injuries and illnesses.
- There were 362 fatalities in Florida resulting from work related accidents during the year of 2007.
- Trenches and excavations in which employees are working should be inspected at least daily by a qualified person. More frequent inspections are needed when rainstorms, freezing/thawing, conditions, and other increasing hazardous conditions occur.

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CFLs from Page 1

hazardous waste referred to as universal waste. Other universal wastes are:

- Lamps (examples include fluorescent, mercury vapor and metal halide)
- Batteries (examples include NiCad batteries and lead acid batteries)
- Electronics (examples include computers, televisions and monitors)
- Mercury containing devices (examples include thermostats, switches and thermometers)
- Pesticides

To recycle any universal wastes on Campus, please call Environmental Health and Safety's main office at 644-6895. For your home recycling needs related to universal or any hazardous waste, contact the Leon County Household Hazardous Waste Center at 606-1803 located at 7550 Apalachee Parkway.

Local Internet Resources

http://www.talgov.com/you/energy/cfl_discounts.cfm
<http://www.leoncountyfl.gov/solidwaste/hazardouswaste.asp>
<http://www.doh.state.fl.us/floridafishadvice/>

Rain from "Fay" Highlights the Need to Protect Campus Storm Water System

Storm water runoff accumulating oil and other contaminants from the streets and parking lots can harm water quality. Maintaining the storm water system on the FSU's campus can improve campus safety and protect the environment. Areas surrounding FSU campus contribute to the water quality of the storm water that flows through the FSU storm water system. Yard debris and trash can easily clog storm water systems and cause standing water. Stagnant water allows mosquitoes to breed and can spread disease. Storm water ditches that get clogged by debris back up and can cause flooding. Properly disposing of yard clippings and trash can prevent the blocking of storm drains. If you see storm water issues please contact the Florida State University's Department of Environmental Health and Safety @ 644-0818 to report concerns.

"User Friendly" from Page 3

- Center your monitor with your keyboard and chair.
- Avoid ear-to-shoulder neck positioning while on the phone. Use a headset for heavy phone use.
- Rearrange the work area to avoid excess bending, stooping, and reaching.
- Try to relax. Many injuries and painful episodes arise from continuously tensing your neck and shoulder muscles while working.
- Consider increasing the amount of exercise you get, since there seems to be a strong relationship between poor physical condition and workplace injury. Overall attention to all aspects of your health such as diet, stress management, and weight control is recommended.

INCORRECT



CORRECT



Radiation from Granite Countertops

If you have newly installed granite countertops and a radiation detector sounds off when you walk by, does that mean the exposure is harmful to humans or animals?

It isn't a surprise that granite emits radiation. So do other items in our households. The amount of radiation emitted from granite can vary depending on the amount of natural uranium and/or thorium concentration. Radioactive elements including uranium, radium, thorium, and a radioactive isotope of potassium are naturally present in our world and are found throughout the environment to a greater or lesser degree in all rocks and soils. Although, typically, granites contain more naturally occurring radioactivity than do other types of rocks such as sandstones, granites contain only a few parts per million of such naturally occurring radioelements as uranium, thorium, and radium. While this is sufficient to produce a reading on a sensitive radiation detection instrument, the level of radiation produced by the natural radioactivity in these granites is well below the level that would result in any harm. So you need not worry about any risk to your health and there is no need to remove the countertops! Source: Health Physics Society at www.hps.org



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