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Safety Talk and Tips

Eastern Region's Environmental Safety and Health Newsletter

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In this issue:

- Cell Phone Recycling
- Energy Saving Guidelines For Personal Computers
- Energy Efficient Lighting
- Safety Tidbits
- Drive More Efficiently

Striving For A Greener World

Energy prices raising cost for business and families. Global warming headlines in newspapers and magazines. The President signing Executive Order 13423, **“Strengthening Federal Environment, Energy, and Transportation Management.”**

More than anytime since the early 1970s, people are starting to take steps to help our world become greener and cleaner. We dedicate this issue to what we can do both as an employer and as individuals to support this national need.

Cell Phone Recycling: “An Easy Call”

The nation's leading cell phone makers, service providers and retailers have teamed up with the EPA to answer America's call for easy cell phone recycling. The effort is part of the agency's [Plug-In to eCycling program](#).

"Thanks to our Plug-In partners' efforts, recycling an old cell phone has become a quick and easy way for Americans to help protect the environment," said Susan Bodine, assistant administrator for EPA's Office of Solid Waste and Emergency Response. "By dropping it off at a store or sending it through the mail, Americans have more recycling options today than ever before."

To kick-off the campaign, the agency released a series of print public service announcements, "Recycle Your Cell Phone. It's An Easy Call," which highlight the convenience and environmental and social benefits of recycling a cell phone. It also introduced a podcast that addresses many common questions on cell phone recycling.

EPA started the campaign because many consumers still do not know where or how they can recycle unwanted cell phones. Consequently, less than 20 percent of unwanted cell phones are recycled each year.

Recycling a cell phone offers an opportunity for everyone to help reduce greenhouse gas emissions, save energy and conserve natural resources. An estimated 100 million to 130 million cell phones are no longer being used, many languishing in storage.

For more information about the cell phone recycling campaign and where to drop-off your old cell phone, visit <http://www.epa.gov/cellphone>.



*Your Eastern Region
Environmental, Safety and
Health Advisory Board*

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Energy Saving Guidelines for Personal Computers

The following is a list of suggestions that you can act upon to reduce the energy usage of your personal computer:

- Configure your monitor to turn off after 20 minutes of inactivity, your hard drive to turn off after 30 minutes of inactivity, and your desktop computer or laptop to go into a standby or sleep mode after 90 minutes of inactivity.

- If your computer does not have a standby or sleep mode, for example Windows NT systems, turn off your monitor when it is not in use.

- Shut down your computer, monitor, and personal printer or place them in a standby mode when you leave the office for more than two hours.

- Do not use screensavers as energy savers as they continue to use the monitor at full power and do not conserve energy.

- Do not turn on your computer, monitor, or printer in the morning until you actually need them.

A misconception is the belief that computers and monitors purchased with the Energy Star logo are already energy efficient. In reality, they have built in energy conservation features but your computer cannot take full advantage of these built in energy saving mechanisms until the power management features are enabled and configured.

Your PC can regulate its own energy consumption with your guidance. Here's how:

Operating Systems, such as Microsoft Windows and the Macintosh OS, have built-in energy management features that can be accessed via the Control Panels that enable them to be configured to turn off the monitor, the hard disks and the system. For windows based PCs select the Start Menu, then Settings, then Control Panel and finally Power Options. This should bring up a Power Options Properties dialog box that allows you to set the time to elapse until separate components power down. This is the same dialog box that can be accessed through the Display Control Panel under the screen saver tab.

For Macintosh computers select the Apple Menu then Control Panels and then Energy Saver. This will also bring up a dialog box for setting sleep times for the entire system, the monitor or the hard disk.

The table below gives some suggestions for turning off components after a specified amount of time has passed without any activity. However, these suggestions should be adjusted according to individual preference and computer usage.

Suggestions for turning off computer components after a period of inactivity:

Component	Time period
Monitor	20 minutes
Hard disks	30 minutes
System standby or hi-	90 minutes

Does it harm the PC to turn it off?

Older computers suffered shorter lifetimes under successive power cycling; however, computer components manufactured in the last three years are designed to enter into a lower power state or turn off under the control of the operating system. Therefore using the power management options or turning off newer computers does not appreciably shorten their lifetime. In fact, by using these features, the lifetime of newer computer components can even be extended.



Waking up a "sleeping" PC

Components that are in a low power mode must be "reawakened" when needed. The time lapse for re-powering components varies. Individual components, such as the monitor or hard drive, usually become active in a matter of seconds; however reawakening the entire system from a system standby or hibernation mode can take more than a minute. You might consider reawakening the computer immediately upon entering your office by moving the mouse or pressing a key on the keyboard, and then getting settled into the office, so that the computer is fully operational when you sit down.

Energy Efficient Lighting

Energy use in the average home can be responsible for more than twice the greenhouse gas emissions of the average car. Lighting accounts for close to 20% of the average home's electric bill. Two new types of lighting can greatly improved your energy efficiency: Compact Fluorescent Lights (CFL) and Light Emitting Diode (LED).

Compact Fluorescent Lights (CFLs)

CFLs are designed to fit into standard light sockets and are now available for 3-way settings and dimmers. They have been redesigned to provide a warm, inviting light instead of the older "cool white". CFLs are best used in areas where lights are on the most. They do not work as well in locations such as a closet where the light is quickly turned on and off. A single CFL light bulb can save you over \$30 during its lifetime. It uses 75% less energy and lasts up to 10 times longer than incandescent. Changing one light bulb to a CFL will keep 400 pounds of CO₂ out of the atmosphere over the life of the bulb.



CFLs contain a small amount of mercury, a toxic metal. One light bulb contains about 5 mg of mercury which is 1/5 that found in a watch battery, 1/100 that in an amalgam dental filling or an old mercury thermometer. However, a power plant will emit 10 mg of mercury to produce electricity to run an incandescent bulb compared to 2.4 mg to produce energy for a CFL bulb. Therefore, it is environmentally beneficial to use CFLs. Proper disposal is the most important thing. Save spent CFLs for a community household hazardous waste collection which will then send the bulbs to facilities capable of treating, recovering or recycling them.

Safety Tidbits

- ⇒ Ninety-five percent of food poisoning cases are never reported
- ⇒ The average bout of sleepwalking lasts six minutes
- ⇒ A pumping human heart can squirt blood as far as 30 feet
- ⇒ About 1,000 American's are seriously injured by their clothing every year
- ⇒ Exposure to 160 decibels will cause instant perforation of the eardrum (A military jet takeoff—140 decibels)
- ⇒ To your fish, tapping on the aquarium glass is as loud as a rock concert

Light Emitting Diodes (LEDs)

LED bulbs last 10 times as long as CFL and 133 times longer than incandescents and since they do not have a filament, they don't break as easy. LEDs do not cause heat build up. They are popular in battery powered items such as flashlights, headlamps and track lighting because batteries will last 10 to 15 times longer. Because of the low power requirement for LEDs, using solar panels becomes more practical and less expensive than running an electric line. Many cities are replacing traffic lights with LED arrays because of the reduced energy costs and the longer life-times of the bulbs reducing maintenance and replacement costs.



LEDs are still expensive, though costs are coming down and the cost is recouped over its lifetime. More residential uses for LEDs are being designed. Currently, LEDs are focused lights and are best for specific task lighting such as a reading lamp, desk lamp, night lights, spot lights, security lights, and signage. They do not radiate light 360° like an incandescent. New designs of LEDs are working to address this. LEDs are available in different colors. Elderly have found that using blue LEDs for reading eliminates eye-strain. Amber LEDs are good for outdoor lighting in that they do not attract insects.

More Safety Tidbits

- ⇒ A mind-boggler: about 40,000 Americans annually are injured by their toilets
- ⇒ The risk that you will be admitted to a hospital tomorrow: 1 in 2,700
- ⇒ Wearing headphones for an hour can increase the number of bacteria in your ear by 700%
- ⇒ Pedestrians killed in the United States by falling objects from 1945-2005: 17,983

Source: Safety Stuff www.MakeSafetyFun.com

Driving More Efficiently

Drive Sensibly

Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town. Sensible driving is also safer for you and others, so you may save more than gas money.

Fuel Economy Benefit:	5-33%
Equivalent Gasoline Savings:	\$0.16-\$1.02/gallon



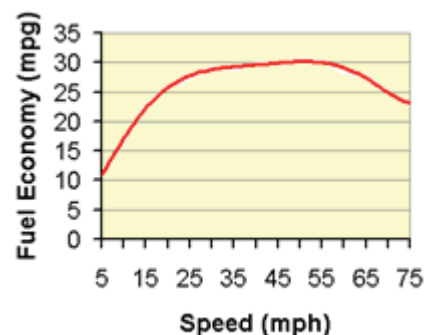
- Observe the Speed Limit

While each vehicle reaches its optimal fuel economy at a different speed (or range of speeds), gas mileage usually decreases rapidly at speeds above 60 mph.

As a rule of thumb, you can assume that each 5 mph you drive over 60 mph is like paying an additional \$0.20 per gallon for gas.

Observing the speed limit is also safer.

Fuel Economy Benefit:	7-23%
Equivalent Gasoline Savings:	\$0.22-\$0.71/gallon



- Remove Excess Weight

Avoid keeping unnecessary items in your vehicle, especially heavy ones. An extra 100 pounds in your vehicle could reduce your MPG by up to 2%. The reduction is based on the percentage of extra weight relative to the vehicle's weight and affects smaller vehicles more than larger ones.

Fuel Economy Benefit:	1-2%/100 lbs
Equivalent Gasoline Savings:	\$0.03-\$0.06/gallon

- Avoid Excessive Idling

Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.

- Use Cruise Control

Using cruise control on the highway helps you maintain a constant speed and, in most cases, will save gas.

- Use Overdrive Gears

When you use overdrive gearing, your car's engine speed goes down. This saves gas and reduces engine wear.



About this Newsletter

This newsletter is brought to you on a quarterly basis by the Eastern Region Environmental Safety and Health Advisory Board to help increase awareness of the importance of the safety and health programs within the Department of Commerce, NOAA, and the National Weather Service. Your comments are welcome. Please send all comments to Kevin Murray.

REMEMBER, SAFETY FIRST!