



THE SSE ELUCIDATOR

"Elucidate: to give clarity through explanation and analysis."



We, as leaders, know that direct engagement with our Soldiers, makes a difference in their safety. You and your Family, better than anyone, know your Soldier. What they like and dislike, how they think, and how their decision process is carried out. Families make a direct impact in how a Soldier reacts in any given situation.

Therefore, I am asking you, the Family, to help your Army take better care of your loved one.

With your direct help and support, we can better protect our nation's most precious assets - our Family members.

Army Safe is Army Strong!

William H. Forrester
Brigadier General, USA
Commanding

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Statistics show that when our Soldiers return from deployment, their risky behaviors follow them back home and the risk of them being involved in an accident is high. Family involvement by monitoring health and fitness can reduce a soldier's individual risks, reduce the risks of vehicular accidents and motorcycle/ATV accidents.

For additional information on the Family Engagement Kit, please contact Dr. Patricia LeDuc, Chief, Human Factors Task Force, at (334) 255-2233 Patricia.LeDuc@crc.army.mil.

Family Engagement Tools:

- ◆ Family Engagement Kit Trifold
- ◆ Post-Deployment Best Practices
- ◆ Army Family Video
- ◆ Post-Deployment Family Engagement Kit Power Point Presentation
- ◆ Training Support Package (AKO login required)
- ◆ Family Engagement Kit Video

Links to Family Engagement Tools can be found at: <https://crc.army.mil/Multimedia/detail.asp?iData=128&iCat=718&iChannel=19&nChannel=Multimedia>



ECO-FRIENDLY LAWNMOWER

Reprinted from Green Energy News February 2, 2008 - Vol.12 No. 45

I'm in love. With a lawn mower. I've never seen her in person, as it were. I've never taken her for a stroll around my yard. I've only seen her in pictures and I've reviewed her, ah, "specifications." That's enough. I know she's perfect for me.



The lawn mower in question is Remington Power Tools new cordless PowerMower (tm).

It has all the features necessary, for most of us, to replace our dirty and heavily-polluting gasoline-powered mower.

On full charge it will run, according to the company, for about an hour - which should be plenty long enough for most small lawns. And, if that's not enough run time, the battery is swappable. Buy a second battery and the mower will run for two hours. Buy three, well, you get the picture.

Further, if you get really stuck, the PowerMower can be plugged into the grid, plugged into your house just like a common corded electric mower (like the old Black and Decker model that I now drive) The grid-connect option also gives the mower more power if your lawn has got out of control. Remington says it's the first and only cordless lawn mower with a corded option.

The battery is a 60 volt. The blade, however, is only 17 inches long - pretty small - which means more walking around your yard, more swaths to cut. Then again, so what. Americans need more exercise any-

way.

The switch to an electric or battery-powered lawn mower can make an immediate difference on the environment. From the first time you use it you'll find mowing a fairly quiet experience. That's good for your and everyone's ears. And, when you stop to pick up a wayward tree branch or something it stops too. Again, quiet and safe. Most importantly, your lungs, and the rest of ours, won't be drawing in toxic exhaust fumes anymore. Remember, gas powered lawn mowers, as well as all gas-powered lawn and garden equipment, have no pollution controls whatsoever.

According to the U.S. Environmental Protection Agency (EPA), a traditional gas-powered lawn mower produces as much air pollution as 43 new cars each being driven 12,000 miles -- 516,000 miles worth of vehicle emissions, which contribute to air pollution and climate change.

Lawn mower pollution is a big deal. Governments would like to see gas powered ones go away. California levies a \$30 surcharge for purchasing one. Other states or communities have turn-in programs. Remington, through its website, will help you find one of those.

The company seems to be finding a niche for itself in selling zero emission lawn and garden equipment in offering a whole line of plug-in electric and battery powered tools including hedge clippers, chain saws and edgers.

If there's a complaint about my new love, she'd be a little tough on my wallet with a retail list of \$450. But then again if that nearly-promised rebate check comes from the Feds by the time the grass begins to grow I'd consider pursuing her.

COMMON SENSE AND ACCIDENT PREVENTION

Generally speaking, we are not *born* with common sense, we *acquire* it throughout life. Actually, common sense is really common experience--we learn about life from others' experiences as well as our own. Awareness of your environment, self-preservation and concern for your fellow workers are all factors in good common sense. Contrary to popular opinion, all workers can prevent themselves from getting hurt. The easy way to avoid pain is to observe how others have taken risks and been injured, rather than learning the hard way--from your own injury. That's common sense!

The experts say at least 80% of industrial accidents are caused by unsafe acts on the part of employees--and not by unsafe conditions. Although employers are required by law to provide a safe and healthful workplace, it is up to *you* to be aware of your work environment and follow safe work practices. By avoiding unsafe acts and practicing common sense, your work will go smoother, with less chance for accidents.

Statistically, most accidents are caused by unsafe acts, including:

Being In A Hurry – Sometimes there is more concern for completing a job quickly instead of safely. Take time to do a good job *and* a safe job.

Taking Chances – Daring behavior or blatant disregard for safe work practices can put the whole work team at risk. Follow all company safety rules and watch out for your fellow employees. Horseplay is never appropriate on the job and can lead to disciplinary action.

Being Preoccupied – Daydreaming, drifting off at work, thinking about the weekend and not paying attention to your work can get you seriously hurt or even killed. Focus on the work you are paid to do. If your mind is troubled or distracted, you're at risk for an accident.

Having A Negative Attitude – Being angry or in a bad mood can lead to severe accidents because anger nearly always rules over caution. Flying off the handle at work is potentially dangerous. Keep your bad moods in check, or more than one person may be hurt. Remember to stay cool and in charge of your emotions.

Failing To Look For Hidden Hazards – At many job-sites, work conditions are constantly changing. Sometimes new, unexpected hazards develop. Always be alert for changes in the environment. Hidden hazards include spilled liquids that could cause slips and falls; out-of-place objects that can be tripped over; unmarked floor openings one could step into; low overhead pipes that could mean a head injury; and other workers who don't see you enter their hazardous work area.

Remember to stay alert for hazards, so you won't become one more accident statistic: You *can* do a quality job without rushing. Maintain a positive attitude and keep your mind on your work. This is just common sense--something smart workers use!

IT TAKES A MINUTE TO WRITE A SAFETY RULE.

IT TAKES AN HOUR TO HOLD A SAFETY MEETING.

IT TAKES A WEEK TO PLAN A GOOD SAFETY PROGRAM.

IT TAKES A MONTH TO PUT THAT PROGRAM INTO OPERATION.

IT TAKES A YEAR TO WIN A SAFETY AWARD.

IT TAKES A LIFETIME TO MAKE A SAFE WORKER.

BUT IT TAKES ONLY A SECOND TO DESTROY IT ALL – WITH ONE ACCIDENT.

TAKE THE TIME NOW TO WORK SAFE AND HELP YOUR FELLOW EMPLOYEES TO BE SAFE.



POLYCARBONATE BOTTLES UNSAFE FOR HOT LIQUIDS

Reprinted from Environmental News Network

Scott Belcher, PhD, and his team of University of Cincinnati (UC) scientists found when the same new and used polycarbonate drinking bottles were exposed to boiling hot water, BPA, an environmental estrogen, was released 55 times more rapidly than before exposure to hot water.

“Previous studies have shown that if you repeatedly scrub, dish-wash and boil polycarbonate baby bottles, they release Bisphenol A (BPA). That tells us that BPA can migrate from various polycarbonate plastics,” explains Belcher, UC associate professor of pharmacology and cell biophysics and corresponding study author. “But we wanted to know if “normal” use caused increased release from something that we all use, and to identify what was the most important factor that impacts release.”

“Inspired by questions from the climbing community, we went directly to tests based on how consumers use these plastic water bottles and showed that the only big difference in exposure levels revolved around liquid temperature: Bottles used for up to nine years released the same amount of BPA as new bottles.” The UC team reports its findings in the Jan. 30, 2008 issue of the journal *Toxicology Letters*.

BPA is one of many man-made chemicals classified as endocrine disruptors, which alter the function of the endocrine system by mimicking the role of the body’s natural hormones. Hormones are secreted through endocrine glands and serve different functions throughout the body.

The chemical—which is widely used in products such as reusable water bottles, food can linings, water pipes and dental sealants—has been shown to affect reproduction and brain development in animal studies.

“There is a large body of scientific evidence demon-

strating the harmful effects of very small amounts of BPA in laboratory and animal studies, but little clinical evidence related to humans,” explains Belcher. “There is a very strong suspicion in the scientific community, however, that this chemical has harmful effects on humans.”

Belcher’s team analyzed used polycarbonate water bottles from a local climbing gym and purchased new bottles of the same brand from an outdoor retail supplier. All bottles were subjected to seven days of testing designed to simulate normal usage during backpacking, mountaineering and other outdoor adventure activities. The UC researchers found that the amount of BPA released from new and used polycarbonate drinking bottles was the same—both in quantity and speed of release—into cool or temperate water.

However, drastically higher levels of BPA were released once the bottles were briefly exposed to boiling water. “Compared to the rate of release from the same bottle, the speed of release was 15 to 55 times faster,” explains Belcher. Prior to boiling water exposure, the rate of release from individual bottles ranged from 0.2 to 0.8 nanograms per hour. After exposure, rates increased to 8 to 32 nanograms per hour.

Belcher stresses that it is still unclear what level of BPA is harmful to humans. He urges consumers to think about how cumulative environmental exposures might harm their health. “BPA is just one of many estrogen-like chemicals people are exposed to, and scientists are still trying to figure out how these endocrine disruptors—including natural phyto-estrogens from soy which are often considered healthy—collectively impact human health,” he says. “But a growing body of scientific evidence suggests it might be at the cost of your health.”

Note: If this controversy makes you worry, you can avoid plastics marked PC (Polycarbonate).

COMPACT FLUORESCENT LIGHT BULBS

With the push to start using Compact fluorescent light (CFL) there has been much discussion regarding what are the risks and what to do, if you break one at home. CFLs contain a very small amount of mercury sealed within the glass tubing – an average of 5 milligrams – about the amount that would cover the tip of a ballpoint pen. By comparison, older thermometers contain about 500 milligrams of mercury.



Mercury currently is an essential component of CFLs and is what allows the bulb to be an efficient light source. No mercury is released when the bulbs are intact or in use. Many manufacturers have taken significant steps to reduce mercury used in their fluorescent lighting products.

Although it is true that exposure to mercury has been linked to central nervous system damage the amount of mercury in a CFL presents a very low risk. So no need to call out the local hazmat team. EPA recommends the following clean-up and disposal guidelines:

Before Clean-up: Vent the Room

Open a window and leave the room for 15 minutes or more.

Shut off the central forced-air heating/air conditioning system, if you have one.

Clean-Up Steps for Hard Surfaces

Carefully scoop up glass fragments and powder using stiff paper or cardboard and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.

Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.

Wipe the area clean with damp paper towels or disposable wet wipes and place them in the glass jar or plastic bag.

Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

Clean-up Steps for Carpeting or Rug:

Carefully pick up glass fragments and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.

Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.

If vacuuming is needed after all visible materials are removed, vacuum the area where the bulb was broken.

Remove the vacuum bag (or empty and wipe the canister), and put the bag or vacuum debris in a sealed plastic bag.

Future Cleaning of Carpeting or Rug: Vent the Room During and After Vacuuming

For at least the next few times you vacuum, shut off the central forced-air heating/air conditioning system and open a window prior to vacuuming.

Keep the central heating/air conditioning system shut off and the window open for at least 15 minutes after vacuuming is completed.

Disposal of Clean-up Materials

Immediately place all cleanup materials outside the building in a trash container or outdoor protected area for the next normal trash.

Wash your hands after disposing of the jars or plastic bags containing clean-up materials.

Check with your local or state government about disposal requirements in your specific area. Some states prohibit such trash disposal and require that broken and unbroken lamps be taken to a local recycling center.

The EPA is working with CFL manufacturers and major U.S. retailers to expand recycling and disposal options. Consumers can contact their local municipal solid waste agency directly, or go to www.epa.gov/bulbrecycling or www.earth911.org to identify local recycling options.

MEDCOM REG 15-15

SAFETY AWARD PROGRAM

A plaque will be awarded each fiscal year to the organization with the most effective overall safety program. This award provides recognition to the organization that has significantly impacted the safety of their organization during their day-to-day operations. This award is to recognize outstanding achievement and in so doing, inspire others to excel in promoting safety awareness through on-the-spot recognition of safety related actions which are above and beyond what is required of an individual or organization. This award will recognize one organization annually.

COMPOSITION

a. The board is comprised of at least four members from the following categories, with the Chief of Staff, U.S. Army Medical Command (MEDCOM), designated to serve as president of the board.

- (1) Chief of Staff, MEDCOM.
- (2) Safety Office, MEDCOM.
- (3) Safety Manager, Major Subordinate Command.
- (4) Safety Manager, Subordinate Activity.

b. Board proceedings will be governed by the Office of The Surgeon General (OTSG) board policies.

DIRECTION AND CONTROL

a. The board, operating under the general guidance of the Chief of Staff, MEDCOM, is responsible for reviewing nominations and selecting not more than one organization for the annual award. Organizations requesting consideration for an award must send the following:

- (1) The organization's mission, location, type, and number of assigned personnel.
- (2) Commander's support of higher headquarters and Department of the Army (DA) safety initiatives.
- (3) Accident statistics and experiences.
- (4) Methods used to effect or sustain accident re-

duction (for example, safety training or new initiatives).

- (5) Major accomplishments.
- (6) Objectives for the coming year.
- (7) Civilian injury and illness reduction program.
- (8) Percentage of commanders who have completed the Commander's Safety Course.
- (9) Seatbelt usage rates.
- (10) Other strategies, controls, or policies that have contributed to mission and operational success. Include circumstances, hazards, movements, etc., evidence of success and potential for command-wide applicability.
- (11) Proactive measures taken to enhance composite risk management implementation.
- (12) Description of total command involvement and support of safety programs.
- (13) Description of initiatives that are not required but will enhance the command safety program, such as purchase of ergonomic equipment or work stations, and partnering with the community or other government activities.

b. Award Initiator: Unit or facility commander or safety manager, collateral duty safety manager or installation/unit safety manager.

c. The Chief of Staff, MEDCOM, will:

- (1) Convene the board to review and recommend approval/disapproval of award applicants.
- (2) Be the awarding authority.
- (3) Present the award at an appropriate ceremony.

d. Documentation: Prepare a memorandum with supporting documentation as needed through your local chain of command to the attention of the Director of MEDCOM Safety, ATTN: MCSM, 2050 Worth Road, Ste 14, Fort Sam Houston, TX 78234-6014.

Plastic Bag Ban



China announced Jan 9, 2008 that production and use of plastic bags in supermarkets and retail shops will be banned beginning June 1, 2008.

This law orders customers to be charged for any they use and shops have been instructed to mark the price of the plastic bags clearly and not fold them into the cost of other items. The bags

also are banned from all public transportation, including buses, trains and planes and from airports and scenic locations.

Companies caught breaking the new rules face fines and possible forfeiture of goods. Ahead of the national directive, Shenzhen announced in November it was considering placing fees on the use of plastic bags, with fines from 5,000 to 50,000 yuan (US\$667 to \$6,667) for retailers who gave them away for free.

This new law could have a considerably positive environmental impact, given that Chinese citizens "use as many as 3 billion plastic bags a day." The law is part of a larger campaign to fight "white pollution" in China, which includes other forms of rampant plastic and styrofoam use as well. In Shenzhen, the General Office of the State Council said, retailers use at least 1.75 billion plastic bags each year. "Most of those bags would decompose only after 200 years and some would never," said the local environmental protection department.

Statements from the government website: "Our country consumes a large amount of plastic bags. While convenient for consumers, the bags also lead to a severe waste of resources and environmental

pollution because of their excessive use and low rate of recycling. The ultra-thin bags are the main source of 'white' pollution as they can easily get broken and end up as litter. We should encourage people to return to carrying cloth bags, using baskets for their vegetables."

Sturdier plastic bags will continue to be available and the manufacturing of cloth bags can be expected to rise. Environmental organizations, including Greenpeace, praised China's move, and Christopher Flavin, president of Worldwatch Institute, an independent research organization in Washington, said "China is ahead of the U.S. with this policy,"

"CHINESE CITIZENS USE AS MANY AS 3 BILLION PLASTIC BAGS A DAY"

This bold and surprising move demonstrates that the Chinese government is starting to take pollution concerns seriously. In the U.S. few city governments have passed (San Francisco) or are considering passing similar legislation (New York).

In preparation for the June 1 deadline, the State Council said, local environment protection departments must improve waste recycling practices and strengthen the monitoring of plastic bag recycling. They should establish an "environment entry threshold", pollution control standards and technical criteria for collecting, delivering, storing and reproducing plastic bags.

When the ban goes into effect, China will join countries such as Uganda and South Africa. Bangladesh banned plastic bags four years ago when officials realized they blocked drains and led to flooding. Since then, customers have taken to using bags made of jute or cloth for shopping.

Could this law trigger similar laws from other national governments? How could this work in the U.S.? Should the U.S. create a similar law?

THE ELUCIDATOR

Office of Surety, Safety and Environment (SSE)
U.S. Army Medical Research Materiel Command
MCMR-ZC-SSE
504 Scott Street
Fort Detrick, MD 21702-5012

SSE Staff Contacts:

Cliff Wendel, Chief SSE

Phone: 301-619-8313

E-Mail: cliff.wendel@amedd.army.mil

Geoff Phillips, Safety Officer

Phone: 301-619-8806

E-Mail: geoffrey.phillips@amedd.army.mil

JoLane Souris, Environmental Officer

Phone: 301-619-2004

E-Mail: jolane.souris@amedd.army.mil

Cavelle Williams, Safety Protocol Review

Phone: 301-619-6035

E-Mail: cavelle.williams@amedd.army.mil



Visit us at:

<http://mrmc-www.army.mil>

Reminder

*For all accidents, no matter how minor,
specific forms documenting the incident must be submitted to your Safety Office.*

Military: DA Form 285-AB-4

Civilian: DOL Claims Forms CA-1 or CA-2

All employees requiring medical attention must visit your local Occupation Health Clinic as soon as possible post mishap.