

BULLETIN

Risk Control

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HAVE YOU SWITCHED TO COMPACT FLUORESCENT LIGHTS IN YOUR HOME?

The big push has been to make homes and living more energy-efficient. As reported in *USA TODAY*, sales of compact fluorescent lights, or CFLs, are booming. Unlike incandescent bulbs, however, compact fluorescent bulbs can pose a health hazard. Who knew? When I saw the CFL bulbs in the store and their claims to save energy costs, I jumped on them. However, I did not read the fine print on the box which states "Lamp contains mercury. Manage in accord with disposal laws".

See www.lamprecycle.org

According to the *USA TODAY* article, CFL bulbs usually contain three to five milligrams of mercury, although new types have as little as one to two milligrams. Mercury is a toxin that can be particularly dangerous to children and fetuses. There is no danger in using CFL bulbs, but if one breaks, users should don plastic gloves and take steps to avoid contamination. Phillip Scarbro, Consumer Division Director at Energy Federation Incorporated, a group that promotes conservation is quoted to say "if a bulb breaks, simply open the windows and doors, sweep up the glass and throw it away. You should not vacuum because that will take whatever level of mercury airborne." So when the label says to "Manage in accord with disposal laws" it means to handle the bulb like other hazardous waste such as paint. Some governments have begun CFL bulb recycling programs, as have IKEA and a few other retailers.

CFL bulbs were first invented in 1976 by Ed Hammer a General Electric (GE) engineer. This invention was in response to the 1973-1974 energy crises. The spiral tube design however was too expensive to make and too fragile to ship, so GE shelved the project.

In 1982, Phillips developed a more incandescent-like warm white CFL. It wasn't until 1995 that a cost-effective, durable spiral design was introduced. By then, due to the problems with early designs, early adopters swore off them forever.



Early designs did not last as long as they do today, 1,000 hours then, and up to 15,000 hours today. They were also more expensive: \$10 to \$20, where today they are as low as \$3. Those early designed bulbs also had unflattering light. With a congressional mandate manufactures will keep coming up with better bulbs.

The CFL bulbs are close to 75 percent more efficient than regular light bulbs. The EPA estimates that if every home in America replaced just one incandescent light bulb with a CFL light bulb, we would save enough energy to light more than three million homes for a year, and more that \$600 million in annual energy costs. This would prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.

There are still some issues with these bulbs: they do not start at full brightness; they are temperature-sensitive (if they get below 30 degrees they have a very slow start); one size does not fit all (the more light that a CFL puts out, the larger the bulb needs to be); if used with a three-way light fixture, many bulbs will pop, hiss, and buzz; and many CFL bulbs do not work well with dimmer switches. Also, if you use them in globe covers that make the bulb look more like an incandescent bulb, the contained heat will reduce the life of the CFL.

Even with the drawbacks, the congressional mandates to have light bulbs at least 25 percent more

efficient by 2012, means that sales of CFL bulbs will continue to grow as incandescent bulbs fade into history. Even if the bulb ends up in the trash, CFL advocates say the bulb represents a net reduction of mercury in the environment, compared with each incandescent bulb. That is because the amount of mercury generated by a power plant to light a CFL bulb is dramatically less than to light an incandescent bulb. Therefore, in our effort to go green and make our homes and living more energy-efficient, we need to take an additional step and properly dispose of the CFL bulbs. Search out recycling programs through your local government, retailers like IKEA or Veolia Environmental Services which will accept used bulbs by mail. Check out: <http://veoliaes-ts.com/Home> as a resource for other recycling needs with home hazardous waste, along with needs you have at work.

FREE ARC FLASH TRAINING

Every year, more than 2,000 workers are treated in burn centers with severe arc flash injuries. The flash is immediate, but the results can cause severe injuries that last months, years—even a lifetime. In some cases, they may cause death.

Fortunately, arc flash hazards can be reduced by following safety precautions and using the



recommended personal protective equipment.

Lewellyn Technology is providing a number of free trainings throughout the State of

California. JPIA members may wish to send safety officers and staff electricians to this training. You can review the upcoming dates and locations at: <http://www.lewellyn.com/schedule.html>.

CELL PHONE USE – A CLARIFICATION TO THE “CLARIFICATION”

It appears the “frequently asked questions” (FAQ’s) originally posted on the DMV’s website were so confusing that a new set of FAQ’s have been created. The new version can be found at: http://www.dmv.ca.gov/cellularphonelaws/dl208_03cell_phone.pdf.

The big question about whether or not a two-way radio operated by a push-to-talk feature can be used, has been addressed. It appears that since two-way radios are not “cell phones”, the new regulation does not apply to them.



If you are still wondering about using a digital two-way radio service built into a wireless telephone (i.e. Nextel), please reference: http://www.dmv.ca.gov/pubs/olin/07_olin/txt/07olin09.htm.

NEW! – Announcing PreventionLink through TargetSafety

The JPIA has partnered with TargetSafety to deliver the PreventionLink program which has the potential to bring substantial value to you and your employees. We hope you find the program to be convenient and easy to use, and require only a minimal time commitment. The program is free to ACWA/JPIA members. PreventionLink offers members the following:

- **Training Management** – Schedule, manage, and track employee training on topics including environmental awareness, occupational health, general safety, human resources, and continuing education for water and wastewater operators.
- **Communication Management** – Exchange critical information and data with everyone at your organization.
- **Compliance Management** – Create, assign, and document completion of key compliance tasks to help ensure regulations and policies are being followed.
- **Risk Management** – Define, measure, and monitor key risk metrics.

For more information please contact Nancy Stangel, Director of Administration, at (916) 535-7510 ext. 3133, or email to nstangel@acwajpia.com.

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