

The PORCELAIN PRESS

February 2013—Weeks 3&4

Special Points of Interest:

Battery recycling

To help reduce battery waste, Fermilab has a battery recycling program. The collection pails around site are for alkaline batteries only, but Fermilab users can contact their D/S/C Waste Coordinator (see list below) for assistance with all other battery types or any waste or battery-related question.

D/S/C Waste Coordinators

AD Wilson, Sylvia
BS Niesman, Brian
CD Pavnica, Amy
DO Thompson, Greg
ES Thompson, Greg
FE Calabrese, Giuseppe
PD Delao, Jose
TD Scerini, Bridget
WR Ylinen, Jonathan

ESH&Q concern or suggestion?

Talk to your Supervisor, SSO or go to the ESH&Q homepage & click on 'Concerns/Suggestions' (lower left).

Electrical Safety

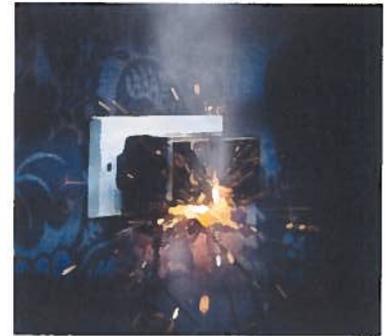
A Basic Electrical Safety class is given to all new Fermilab employees and if you are not an electrical worker, this is most likely the only electrical training that you have taken. The class covers topics such as basic electrical theory and the various hazards of electricity, including shock and arc flash.

Shock is the flow of electric current through your body. Depending on how much and where the current flows, a shock could be barely noticeable or it could cause ventricular fibrillation, even death. A common electrical receptacle on the wall has more than enough energy to cause a dangerous shock.

An arc flash usually occurs in high powered electrical equipment when a tool or other piece of metal touches an energized current carrier to ground. Much energy can flow through the metal very quickly, vaporizing the metal. Once the arc is started, it can be self-sustaining. The vaporized metal can destroy skin and catch clothing on fire, which causes more damage. The explosive force of an arc flash can push a worker back with significant force. Injuries from arc flashes are often devastating and can be deadly.

No matter what your job, it's important to be aware of electrical hazards. In the DOE complex, from 2008 through October 2012, 75% of shocks happened to non-electrical workers. For situations involving non-electrical work, faulty equipment accounted for 56% of the shocks, and 44% were attributed to human error. For shocks involving electrical work, 75% were caused by human error and 25% by faulty equipment. **Before plugging a piece of equipment into a receptacle, inspect the plug.** Incorrectly wired or damaged equipment is a common source of shock to the average worker.

The Basic Electrical Safety course does not prepare you to do any type of electrical work. It is intended to prepare you to be aware of potential hazards and to recognize existing hazards. Non-electrical workers should be aware that there may be powerful equipment adjacent to their workplace. Stay away from equipment protected by red fences or rotating beacons. If you spot problems with electrical equipment, you should report it to your supervisor.



Tips on Electrical Safety at Home

- Have wiring inspected in homes that are more than 10 years old.
- Never place electric cords under rugs or bedding. Heat or sparks from these cords could cause a fire.
- Follow the safety tips on new appliances.
- Check electrical cords for signs of wear. Replace frayed or cracked cords to prevent shocks and fires.
- Check labels on lamps and use the right-sized bulb.
- Fix electrical problems right away, but if you are not familiar with electrical work then hire a licensed professional.
- If a cord has three prongs, use it properly. Don't remove the extra prong. The third prong is there because the appliance must be grounded to prevent electrical shocks.