City of San Angelo
72W College Ave 2nd Floor
San Angelo TX 76902

#187108

CONSTRUCTION

Safety Services Company

Worksite: _____ Instructor: _____ Date/Time: _____

# Topic C770: Maintenance (Electricity and its Hazards)

**Introduction:** Your workplace is dependent on electricity for its operations. Thus, electrical hazards will always be present in the place you work in. Here, you will learn how to keep safe around electricity as well as know how to avoid the hazards (such as electric shock or electrocution) that you may be exposed to.

**You are exposed to electrocution when you come into contact with:**

- Faulty electrical appliances or an energized source.
- Worn, improperly used or damaged extension cords
- Improperly wired or ungrounded outlets
- Faulty equipment and wiring
- Damaged receptacles and connectors

**Do's and Dont's:**

- Use ground fault circuit interrupters (GFCIs). These devices are lifesaving and inexpensive.
- Implement and observe safe work practices (such as wet clean-up processes that are electrocution-safe) around electricity.
- Report unsafe equipment and unsafe work practices to your employer immediately.
- Understand that touching the outside of a metal outlet box with one hand while plugging in an appliance with the other hand may complete the electrical circuit, forcing current through you and exposing you to electrocution.
- Use plugs and receptacles that have been designed to prevent energization until insertion is complete.
- ***Don't*** plug or unplug any electrical appliance or equipment with wet hands or while standing on a wet surface.
- ***Don't*** put your fingers or other materials on the prongs of a plug while you are inserting it into an outlet.
- ***Don't*** remove plugs from receptacles by pulling on the cord.
- ***Don't*** use damaged cords or receptacles. This may promote shocks. Replace these damaged cords.

**Know emergency procedures and policies for electrical emergencies at work:**

- Learn how to shut off the current (such as flip breakers, or lever switch, etc.) in case of an emergency.
- Make sure electrical control panels are properly labeled.
- Don't touch an electrocution victim until the power has been turned off.
- Never use faulty equipment or damaged receptacles and/or connectors.
- Learn how to perform CPR.

**The following are OSHA Standards (29 CFR 1910. 22, 303, 304, 334) around electricity:**

Electrical services near sources of water need to be properly grounded. Electrical equipment shall be free from recognized hazards.

Tag out and remove from service all damaged receptacles and portable electrical equipment. Repair all damaged receptacles and portable electrical equipment before placing them back into service.

Exposed receptacle boxes must be made of nonconductive material. All circuit breaker or fuse boxes must have a label for each circuit breaker or fuse that clearly identifies its corresponding outlets and fixtures. Also, breaker switches should not be used for on-off switches.

Keep aisles and passageways clear, in good repair, and with no obstruction across or in aisles that could create a hazard. Provide floor plugs or ceiling plugs for equipment so power cords need not run across pathways. Perform regular checks and maintenance of all your electrical equipment for wear and damage

**Conclusion:** There are many electrical hazards because of the variety of electrical appliances in use. Be aware of these hazards and prepared for emergencies to keep yourself safe from electrocution at work.

***Employee Attendance***: *(Names or signatures of personnel who are attending this meeting)*

_____ _____ _____
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***These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.***