

MAFES Dawg Tracks



April 9, 2007

Safety Tips: *Electric Safety*



Good old common sense can keep us “between the ditches,” if we use it. In some areas, we need “horse sense” and human sense. For me, electrical safety is one of the areas where we need more than old-fashioned common sense. Electricity is a wonderful invention and what would we do without it, now that it is a fundamental need as opposed to a luxury as it was many years ago. We should always respect it and practice extra precautions when using it. Following are some tips that I hope will revive your sense of respect and need for practicing precaution with its use:

- **Use appropriate clothing, shoes, and headgear for the job at hand --** A hard hat and steel-toed shoes will help protect you from falling objects. Rubber soles and heels without nails will help you guard against electrical shock. Wear fitted clothing where possible; loose fitting clothing can cause you to get caught on an object. Don't wear metal rings and watchbands for the same reason. Wear safety glasses to prevent sparks or flying objects from getting in your eye.
- **Use tools that protect you --** Use only Underwriters' laboratories approved tools. Double insulated power tools offer valuable protection against shock. Hand tools, pliers, and screwdrivers all should have insulated handles. All power tools should have 3-wires sockets.
- **Keep tools in good condition --** Repair or replace damaged tools. If extension cords are used, be sure to use GFCI's; or if permanent plugs aren't available, use portable ones. Extension cords should only be used in temporary situations. If they are to be used for an extended time, then permanent plugs should be installed.
- **Use Ground Fault Circuit Interrupters on power sources --** If some construction or renovation is in process, GFCI's should be installed. In other situations where they aren't present, portable ones should be used.
- **Keep structures clean --** Good housekeeping habits can prevent injuries to animals and humans, as well as present a positive influence of pride in your workplace.
- **When working in damp locations, take precautions against shock --** Do not stand on wet ground or a damp floor when using electrical equipment. Stand on a rubber mat or other non-conducting material. Use GFCI's.
- **Use heavy-walled conduit --** In many cases, agriculture buildings are exposed to a lot of abuse. Conduit in these buildings will get this same exposure. This is the reason for suggesting heavy-walled material.

- **Never work on a “hot” electrical circuit -- Disconnect** power to the branch before you work on wiring or equipment. Test the circuit to be sure it is not live by plugging in a lamp or tester. **Lockout or tagout to prevent another person from turning the power back on.** Avoid extension cords when at all possible!
- **Use a watertight, non-metallic conduit in wet locations like milking parlors and fruit and vegetable processing areas.**
- **In agricultural buildings, use wiring devices, boxes, and fittings that are watertight and dust tight and made of corrosive-resistant materials.**
- **Follow code requirements for wiring livestock facilities.** Some examples of buildings that should follow strict code requirements,
 - ~ Buildings that are totally enclosed and house livestock in confinement and environmentally controlled.
 - ~ Buildings where dust or dust with water may accumulate.
 - ~ Buildings where animal excrement may cause corrosive vapors in the confinement area.
 - ~ Buildings where corrosive particles may combine with water.
 - ~ Buildings where the area is damp and wet because of frequent washing with water and sanitizing agents.
- **Lighting fixtures that may be exposed to moisture from condensation or building cleaning water must be water tight.**
- **Lighting fixtures that may be exposed to physical damage from dust, moisture, or corrosive gases must be protected by a suitable guard.**
- **Electrical circuitry for the water supply system of the building should be wired ahead of the main electrical disconnect at the building.** Then, if the electrical system at the building were shut off, there would still be a supply of water to the structure.
- **For convenience and safety, use underground wiring to and within the grain center.**

I realize that many of these tips are “old soap” for many folks, but reviews and “memory joggers,” can sometimes be the key to saving a life threatening injury to you or to a younger employee who hasn't had the same exposure as we have had.

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**The Door to Safety Swings on the
Hinges of Common Sense!!
DARE TO BE AWARE!**