

For Your Safety: Water and Electricity

Whenever electricity mixes with water the result can be deadly. As we all know water is an excellent conductor, allowing electricity to find the fastest path to ground. This can be deadly if the human body is part of the circuit, as would happen if a worker were standing in water when using a faulty electrical device. Because many scrap processing operations take place outdoors, the threat of electrical shock increases when the weather produces wet and snowy conditions. To protect you and your coworkers make sure you take extra precautions when working around wet areas, and do your part to identify situations that can produce electrical shock. Here's a list of common things to look for:

- Inspect electrical equipment before each use and make sure the insulation is in good condition.
- Check that plugs have a good, tight connection.
- Never bend a 3-prong plug or force it into a 2 pronged outlet.
- Check extension cords for cracked or broken outer casings.
- Even if the extension cord is free from cracks and breaks, avoid dragging it through water.
- Never work around a source of electricity when you, your surroundings, your clothing, or your tools are wet.
- Use insulated hand tools and double insulated power tools.
- Remove all metal jewelry, rings, and watches before working on electrical equipment.
- Use Ground Fault Interrupters (GFI's) when working outside, near wet areas or when using extension cords. GFI's help to protect you from serious electrical shocks and burns by sensing the amount of current going into the piece of equipment and the amount of current going out. If this current differs by as much as 5 milliamps the GFCI will trip within 1/40 of a second.

Lastly, look out for sources of water. Report any new leaks in the roof, plugged drains or flooding in the work area. Keeping the water out and away from electrical sources is the best way to keep you safe.

This e-mail was produced by the Institute of Scrap Recycling Industries, Inc. For more information, visit us on the Web at www.ISRI.org
For comments or suggestions about *For Your Safety*, e-mail barneyboynton@isri.org

November 28, 2006