Watch Out For Electrical Fire Hazards

Electricity is one of the most common sources of workplace fires. Obviously, eliminating the hazard by eliminating electricity is not an option. Instead, we simply need to understand that electricity is a fire hazard and to work safely with and around it.

Good Housekeeping Is Essential

Good housekeeping is a step in the right direction. Allowing trash, dust or other debris to build up is inviting an electrical fire. Even allowing dirt or grease to build up on power tools poses a fire hazard. Fire safety is just one reason why housekeeping is so important.

Some fires are a result of defects in the power delivery system. Wiring can quickly fail due to faulty installation, overloading, physical damage, aging and deterioration by chemical action, heat, moisture and weather. If wiring in your work area is showing signs of this sort of damage, let us know. It should be replaced immediately.

Avoid Overloading Circuits

Another thing to watch out for is overloaded circuits. Attaching too many electrical appliances or pieces of equipment into the same circuit creates a serious hazard. Dimmed or flickering lights or decreases in output are symptoms of an overloaded circuit. When using a high wattage piece of equipment, try to unplug everything else on the same circuit.

One common cause of overloaded electrical circuits is the use of extension cords and multi-plug outlets. Extension cords should be used only temporarily and only when absolutely necessary. It is also important to use an extension cord that is fit for the job.

Monitor Motors

Motor troubles can trigger a fire. Overheating due to excessive dirt, overloading, poor ventilation, arcing or sparking could ignite combustible materials (chaff, grease, trash) on or near it. Keep the area around motors and heaters free of flammable or combustible materials. Provide plenty of ventilation for motors, and keep them clean. Internal failures or shorts could cause a motor to burst into flames.

Most electrical devices are subject to internal wiring failures, faulty power cords and switches that add to fire risk. Inspect all electrical devices and their cords. Repair frayed insulation at once. If an electrical device does not work or works poorly, makes unusual noises, smokes or has a burnt smell, or issues sparks or a pop, unplug it immediately, and have the problem fixed.

Call For Help

On or off the job, if an electrical fire starts at a wall outlet, pull the plug by the cord or turn off the main switch. Call the fire department, give them the address and tell them it's an electrical fire. At home, if the fire is small, you may want to just use your home CO2 fire extinguisher. Never put water on an electrical fire. If in doubt, get everyone out. If the fire is large, call the fire department and try to turn off the main power source.

Keep in mind that fire needs a combination of three things to start: fuel; oxygen; and heat or an ignition source. All we have to do is make sure these three things never mix. It's not always easy when you think about the fact that oxygen is always present and fuel can be almost anything. An ignition source can be a flame, spark, chemical reaction or even simple friction. Because the three components of fire are so readily available, we really need to pay attention to fire safety.

Examine Your Work Area

Make sure you are aware of the fire components that may be present in your work area. For example, electricity, flammable liquids, space heaters and reactive chemicals are all potential hazards. Also be on the lookout for welding and cutting operations and any areas where smoking is permitted.

It is also important that everyone knows what to do in the event of a workplace fire. Everyone has a role to play in an emergency situation and it is essential that you know what your role is. This is something we'll talk about at a different meeting. In the meantime, however, if you're not sure about your role, please ask.

Thanks for your attention.

Have a safe day."

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