OSHA Training Toolbox Talk: OSHA's Lockout/Tagout Standard – Before You Get Started . . .

[Reference 1910.147(d)(1) & (2)]

It's so easy to jump head-first into your lockout/tagout procedures when performing maintenance, even on those pieces of equipment or machinery that have more than one source of hazardous energy. Just start turning off power switches and closing valves, apply your locks and tags, and go to work. But before you get started, there is some very important information you first need to know that, if overlooked, could increase your chances of being injured or killed.

Before shutting off the energy sources for a piece of equipment or machinery to perform service or maintenance, the OSHA lockout/tagout standard states that authorized employees must have knowledge of all the types and magnitudes of the energy they are dealing with. The authorized employee must also be aware of the hazards of the energy to be controlled, and possess a full understanding of the methods or means to control all applicable sources of hazardous energy.

At first, just turning off an electrical switch might seem to be all that's necessary to kill the power to a machine. But remember that some electrical-powered equipment has capacitors or rectifiers that might hold a charge for a while even after the power is cut off. These units will need to have the stored power bled off or otherwise dissipated before making contact with these parts. Also, remember there are some machine parts that continue to rotate even after the power has been killed; flywheels on equipment such as mechanical presses are one example that comes to mind.

And while you may intuitively think that all valves are to be placed in the closed or off position to control hazardous energy sources, sometimes it is actually necessary to instead open some valves, to relieve residual pressure that has built up inside of some pipes, hoses, or vessels. Finally, do not overlook potential energy sources, such as compressed or elongated springs under tension, and cams on shafts that come to rest at their highest point when the machine stops running; often times the cam shafts have to be manually rotated to relieve this potential energy.

How can you make certain that you are aware of how to control all potentially hazardous sources of energy associated with a piece of equipment or machinery? This can best be achieved by first reviewing the machine-specific energy control procedure for the machine or piece of equipment you are going to be working on. OSHA requires a written procedure be developed for all machines with two or more energy sources. Also make sure you do not work on any equipment unless you have been trained on its specific procedure. By arming yourself with this knowledge and following all of the other steps necessary for proper lockout/tagout of equipment and machinery, we can help protect ourselves from injury, or even worse, on the jobsite.

Does anybody have a question or comment about the types of knowledge needed to comply with OSHA requirements before implementing lockout/tagout? Please be sure to sign your name to the training certification form so you get credit for attending this training session.