Lockout/Tagout Standard

Proper Lockout Procedure
Lockout

- Lockout is a technique used to prevent the release of hazardous energy, or to prevent the hazardous energy from escaping.
- A padlock is placed on the appropriate energy isolating device that is in the off or closed position.
The “Fatal Five” Main Causes of Lockout/Tagout Injuries

- Failure to stop equipment
- Failure to disconnect from power source
- Failure to dissipate (bleed, neutralize) residual energy
- Accidental restarting of equipment
- Failure to clear work areas before restarting
Definitions

- **Authorized Employee** - one who locks out machines or equipment in order to perform the servicing or maintenance on that machine or equipment.

- **Affected Employee** - one whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
Energy Isolating Device - A mechanical device that physically prevents the transmission or release of energy.

Energy Control Procedure - Safety program adopted by the employer that includes energy control procedures plus provisions for inspecting the procedures and training employees for lockout/tagout.
Hazardous Energy Sources Found in the Workplace

- Electrical
  - Generated
  - Static
- Mechanical
  - Transitional
  - Rotational
- Thermal
  - Machines or Equipment
  - Chemical Reactions
- Potential
  - Pressure
    - Hydraulic
    - Pneumatic
    - Vacuum
  - Springs
  - Gravity
Types of Lockout Devices

- Plug Locks
- Ball Valve Lockout
- Gate Valve Lockout
- Group Lockout Hasp
- Electrical
- Hydraulic, pneumatic, and other pressurized systems
Lockout Procedure

0 Alert the operator (s) that power is being disconnected.
1 Preparation for Shutdown
2 Equipment Shutdown
3 Equipment Isolation
4 Application of Lockout Devices
5 Control of Stored Energy
6 Equipment Isolation-Verification
Removal of Lockout

- Ensure equipment is safe to operate
- Safeguard all employees
- Remove lockout/tagout devices. Except in emergencies, each device must be removed by the person who put it on.
- Last person to take off lock
- Follow checklist
Temporarily Reactivating Equipment

- Remove unnecessary tools from the work area and make sure everyone is clear of the equipment
- Remove lockout/tagout devices and re-energize the system
- As soon as the energy is no longer needed, isolate the equipment and re-apply lockout/tagout, using the six step procedure.
Special Situations

- Servicing lasts longer than one shift.
- Contractors are performing service or maintenance at your workplace.
- Worker who applied lock is not available.
Tidbits of Info.

- Never attempt lockout/tagout procedures unless you have been trained and certified by your employer under an approved Energy Control Program.

- Never loan or share your lock, combination, or key with anybody else.

- Always be sure all lockout/tagout devices are compatible with the environment in which they will be used i.e. corrosive, humid, etc.
Any Questions?