Lockout - Tagout

Safety Training Handout

Control of Hazardous Energy

Use Lockout Tagout to control Hazardous Energy before equipment maintenance or adjustment

Hazards of not using Lockout Tagout

Amputation

Burns

Cuts

Fractures

Electrocution

Chemical Exposure

Six Steps in Lockout - Tagout

- 1. Notify all affected Employees
- 2. Conduct a Normal Shutdown
- 3. Place all controls in off & shut all control valves
- 4. Install Lockout Tagout Devices & Tags
- 5. Release Stored Energy
- 6. Verify Isolation

Release from Lockout - Tagout

<u>Inspect Work Area</u> - check for parts, tools, missing guards. Check to ensure the equipment is ready to operate

<u>Keep Other Safe</u> - make sure everyone is clear of the equipment before starting. Make sure they know the machine is going to be started

Remove Locks & Tags - each lockout - tagout device must be removed from each energy isolating device by the person who applied the device

Rule # 1: Know the Equipment

Rule #2: Know the Energy Sources

Rule #3: Use Lockout Tagout EVERY time

Types of Hazardous Energy

- Electrical
- Thermal
- Gravitational
- Chemical
- Stored
- Motion
- Hydraulic
- Pneumatic

Types of Lockout Devices

- Breaker Clips
- Plug Buckets
- Blank Flanges
- Threaded Pipe Caps
- Threaded Pipe Plugs
- Expansion Plugs
- Pancake Flanges
- Handwheel Caps
- Lever Locks

Venting & Draining Systems

- Vent or drain to a safety container
- Use eye protection when venting or draining
- Use chemical safety precautions