



**COMPANY  
HEALTH & SAFETY  
PROGRAM**

Issue: A  
Date: 4/20/2009  
Rev: 2  
Date: 11/14/17  
Authorized:

**Title: Lockout/Tagout/Tryout**

Section No: 24

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## **1.0 PURPOSE**

The purpose of this section is to establish minimum requirements for the isolation and/or removal of energy sources such as electrical, mechanical, pneumatic, hydraulic, chemical and thermal that may pose a threat to the health or safety of PPP employees and others.

## **2.0 SCOPE**

This section provides lockout/tagout/tryout requirements and procedures to be followed when the energy control program of the owner or host employer is not in effect.

## **3.0 INDEX TO SECTION**

- 1.0 Purpose
- 2.0 Scope
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- 4.0 Impact Statement
- 5.0 Procedures
- 6.0 Training
- 7.0 Communication With the Host Employer
- 8.0 PPP Facilities

## **4.0 IMPACT STATEMENT**

All employees are required to comply with the restrictions and limitations imposed on them during the use of an energy control procedure.

Authorized employees are required to perform lockout/tagout/tryout in accordance with the controlling procedure.

Due to the potentially critical repercussions that could occur, disregard by an employee for a lock or tag being used for energy control will not be tolerated and is grounds for immediate termination of employment with Power Process Piping, Inc.

**This program is subject to periodic inspections, conducted & documented by the PPP Safety Director or his designee at least annually to ensure procedures & requirements are being followed.**



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## **5.0 PROCEDURES**

### **1. Steps To Control Hazardous Energy**

- a. All affected employees shall be notified that the system, machine or equipment is going to be shut down, energy sources locked out and work performed.
- b. Authorized employee(s) shall conduct a survey to locate and identify all switches, valves or other energy isolating devices that apply to the system/equipment to be locked or tagged out.
  - (i) The authorized employee shall have knowledge of the type & magnitude of the energy, the hazards of the energy to be controlled, & the methods or means to control the energy.
- c. If the system/equipment is operating, shut it down by following the normal stopping procedure (e.g., depress stop button, open switch, close valve, etc.).
- d. Position energy isolating devices so that the system/equipment is isolated from the energy source(s).
- e. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam or water pressure) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

### **2. Steps To Perform Lockout/Tagout**

- a. Lock out energy isolating devices with lockout devices and/or assigned individual locks. Assigned locks are to be used strictly for energy control and not for any other purpose. Lockout Device: A device that utilizes a lock, either key or combination to hold an energy isolating device in a safe position.
- b. Lockout devices and/or assigned individual locks shall indicate the identity and contact information of the employee applying the device.



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- c. Lockout devices, where used, shall be affixed in a manner that will hold the energy isolating devices in a safe or off position. *TAGOUT DEVICE: A warning tag (weather & chemical resistant) standardized in size, color, with wording warning of hazardous energy (Do Not Start) (Do Not Open) (Do Not Close) (Do Not Energize) (Do Not Operate).*
  - d. Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the safe or off position is prohibited.
  - e. Where a tagout device is used on an energy isolating device designed with the capability of being locked, the tag attachment shall be fastened at the same point at which a lock would be attached.
  - f. Where a tag cannot be affixed directly to an energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
3. Testing Lockout/Tagout Effectiveness – *Tryout*
- a. Ensure that no personnel are exposed to potential hazards.
  - b. Verify the isolation of the system/equipment by operating the push button or other normal operating control(s) or otherwise testing to make certain the system/equipment will not operate.
  - c. Return operating control(s) to neutral or off position after verifying the isolation of the system/equipment.
4. Safety testing machines when the LOTO devices must be temporarily removed
- a. Clear away tools; remove employees; remove the LOTO device; energize & proceed with testing; de-energize & reapply control measures. This procedure should be documented (i.e., who performs & verifies).
5. Restoring System/Equipment to Service



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- a. Check the system/equipment and the immediate area to ensure that nonessential items have been removed and all components are operationally intact.
  - b. Check the work area to ensure that all employees have been safely positioned or removed from the area.
  - c. Verify that controls are in the neutral or off position.
  - d. Remove blocking if applicable.
- Note: *The removal of some forms of blocking may require reenergization prior to safe removal.*
- e. Remove the lockout/tagout devices and reenergize the system/equipment.
  - f. Notify affected employees that the work is completed, the lockout/tagout devices have been removed and the system/equipment is ready to use.

**6. Lockout/Tagout Device Removal Requirements**

- a. Each lockout/tagout device shall be removed from each energy isolating device by the authorized employee who applied it.
- b. When the authorized employee who applied the lockout/tagout device is not available to remove it, that device may be removed under the direction of the PPP project supervisor provided that:
  - (i) The procedure used provides the same degree of safety as the removal of the device by the authorized employee.
  - (ii) It is verified that the authorized employee who applied the device is not at the jobsite.
  - (iii) All reasonable efforts are made to contact and inform the authorized employee that his/her lockout/tagout device has been removed, and it is ensured the authorized employee has this knowledge before he/she resumes work at that jobsite.



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**7. Group Lockout/Tagout**

- a. Primary responsibility shall be vested in one authorized employee for a set number of employees working under the protection of a group lockout or tagout device.
- b. When more than one crew or craft is involved, one authorized employee shall be assigned overall jobsite lockout/tagout control responsibility to coordinate affected work forces and ensure continuity of protection.
- c. Each authorized employee shall affix a personal lockout/tagout device to the group lockout device, group lockbox or comparable mechanism when he/she begins work, and shall remove those devices when he/she has completed work on the system/equipment.
- d. Specific procedures shall be utilized during shift or personnel changes to ensure the continuity of lockout/tagout protection.

**6.0 TRAINING**

1. PPP shall provide training to affected employees to ensure that:
  - a. The purpose and function of the energy control program in use are understood;
  - b. The knowledge to recognize applicable hazardous energy sources is acquired;
  - c. Employees are aware of the type and magnitude of the energy available in the workplace;
  - d. The means and methods necessary for energy isolation and control are understood; and
  - e. The knowledge and skills required for the safe application, usage and removal of the energy controls are acquired.



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- f. Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced.
2. Training shall be accomplished by means of any of the following:
    - a. The jobsite orientation;
    - b. The weekly site employee safety meeting; or
    - c. A special lockout/tagout/tryout class.
  3. Training shall be documented by use of a safety training attendance record. The attendance record must be sent to the PPP safety director, and a copy must be kept on file at the jobsite for the duration of the project.

#### **7.0 COMMUNICATION WITH THE HOST EMPLOYER**

Whenever PPP employees may be engaged in activities that require the control of hazardous energy sources (lockout/tagout) the PPP project supervisor shall ensure that:

1. The Host Employer is informed and approves of all energy control procedures that PPP may implement.
2. The Host Employer is requested to communicate existing respective lockout/tagout procedures, and any other information that may pertain to executing hazardous energy control.

Lockout procedures for the equipment listed shall be controlled and supervised by the PPP shop supervisor.

#### **8.0 PPP FACILITIES**

At the PPP Plymouth, Michigan Facilities power tools and equipment are used that require periodic maintenance or repair. It shall be the responsibility of the PPP shop supervisor and/or the tool manager to ensure that appropriate energy isolation procedures are followed during maintenance/repair work.

Any power tool or equipment that can be unplugged while being serviced shall be unplugged. The plug shall be tagged, locked, positioned or otherwise made so that it cannot be reconnected without authorization from the shop supervisor or the tool manager.



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Equipment that is required to be disconnected and locked out while being serviced includes:

- Overhead cranes;
- Electric welding machines;
- Air Compressor;
- Positioners;
- Liquid cooled band saw;
- Sub-arc machine; and
- All heating, cooling and ventilating equipment.

Lockout procedures for the equipment listed shall be controlled and supervised by the PPP shop supervisor.

**REVISION HISTORY**

Revision number	Description of change	Written by	Checked by	Effective date
1	Revised to meet current standards	George Newton	Safety	1/7/2011
	Program reviewed and Revision History added		GMN	4/16/2014
2	Revised section 5	Mike McCaffrey	MJM	12/5/17