

Lockout/Tagout for Affected Workers

LENGTH: 13 MINUTES

Production Year: 2023

PROGRAM SYNOPSIS:

The lifesaving practice of controlling hazardous energy is commonly referred to as “lockout/tagout.” Conditions that require lockout/tagout typically occur during maintenance, service, or repair operations. OSHA’s standard of controlling hazardous energy categorizes three types of workers as related to lockout/tagout operations: authorized workers, affected workers, and other workers. Employees who may be impacted or affected by the de-energization of equipment or processes are “affected workers” and they are the focus of this program. Although affected workers do not perform lockout procedures, they are required to know how to interact with the authorized employees who actually perform the lockout.

PROGRAM OBJECTIVES:

After watching the program, the participant should be able to explain the following:

- What is lockout/tagout;
- The three types of workers listed in OSHA’s standard and their differences;
- The responsibilities of an affected worker;
- The written Energy Control Plan;
- The need for communication between workers;
- The proper use of locks and tags.

PROGRAM OUTLINE:

INTRODUCTION

- A machine becomes jammed by materials and needs to be cleared. A machine guard must be removed in order to lubricate a part. Some electrical switchgear needs to be serviced. And a chemical process tank needs to be entered for cleaning.
- These are just a few of the common workplace situations that require the control of hazardous energy to protect workers from the unexpected startup or energization of machinery or equipment.
- Controlling hazardous energy is commonly referred to as “lockout/tagout.”
- The Occupational Safety and Health Administration, OSHA, requires that all sources of hazardous energy be controlled any time machine guards are opened or removed or electrical doors or cover plates are opened or removed.
- Lockout/tagout must also be performed any time a worker is potentially exposed to injury from the inadvertent startup of equipment or unintentional release of hazardous energy.
- An affected worker makes this point: “The whole point of lockout/tagout is to make sure no one gets hurt when a machine is being serviced. And the way for that to happen is for the maintenance worker to turn the power off and then lock it, so that no one else can restart it. Then, they’ll put a tag on it that says, “Do Not Operate.” For me, as a machine operator, it’s important to understand the process, so that I don’t try to restart a machine that’s being serviced, and I don’t get hurt myself.”
- Many types of machines or equipment are powered by multiple energy sources. Some types of energy sources that must be controlled include electricity, compressed air or “pneumatic” systems, pressurized liquids or “hydraulic” systems, and stored energy or “potential” energy, such as that found in springs under tension, capacitors, or even the force of gravity.
- Conditions that require lockout/tagout typically occur during maintenance, service, or repair operations.

TYPES OF WORKERS

- OSHA’s standard 1910.147 titled “The Control of Hazardous Energy” requires employers to establish a written Energy Control Program. This written program contains equipment-specific lockout/tagout procedures in addition to governing all aspects of the company’s lockout/tagout program.
- OSHA’s standard also categorizes three types of workers as related to lockout/tagout operations: **Authorized** Workers, **Affected** Workers, and **Other** Workers.

- According to OSHA, employees who may be impacted or affected by the de-energization of equipment or processes are “affected workers.” Affected workers are the focus of this program.
- Another affected worker comments: “Look, as a material handler, I know how to run the conveyor. I’m good at it. But that doesn’t mean I know how to service it safely. I’m not authorized to remove guards or perform other service that requires my machine to be locked out. But because my work may be affected by lockout/tagout operations, I’m classified as an “affected worker” and I must also receive lockout/tagout training.”

DIFFERENCE BETWEEN AFFECTED AND AUTHORIZED

- As an affected worker who may be impacted by lockout/tagout operations, it’s important to understand that while you are not expected or permitted to perform lockout/tagout procedures, you do play an important role in your organization’s energy control procedures. And it is critical that you know and understand your responsibilities.
- Because *affected* workers must communicate and interact with *authorized* workers (who are permitted to perform lockout/tagout operations), it’s important they understand some of the skills and duties required of authorized workers.
- Authorized employees are the workers who perform lockout/tagout procedures and are the only ones permitted to do so.
- OSHA requires that authorized employees be able to identify the types and magnitudes of the energy sources involved and understand the methods and means for isolating and controlling that energy.
- Also, authorized employees must understand the specific hazards of the equipment or machinery to be de-energized, know the proper shutdown procedures, and be able to verify that all hazardous energy has been released or isolated.

RESPONSIBILITIES OF AN AFFECTED WORKER

- Next, let’s discuss the responsibilities of the affected worker and what to expect during a lockout/tagout operation. The Occupational Safety and Health Administration, OSHA, defines an affected employee as any worker “whose job requires him or her to operate or use a machine or equipment on which service or maintenance is being performed under lockout or tagout, or whose job requires him or her to work in an area in which such servicing or maintenance is being performed.”
- Before a lockout/tagout procedure takes place, all affected employees will be informed that equipment or processes are being shut down and told how long the equipment will be out of service.
- This type of communication is important in order to prevent affected workers from attempting to re-start the equipment while it is being serviced.
- “Working safely requires clear communication from everyone involved,” notes an affected worker. “When it comes to lockout/tagout, I’ll need to know beforehand if my process is being taken offline and for how long.”
- Be aware that affected workers themselves are not permitted to service or maintain machinery or perform lockout/tagout procedures. However, affected workers must receive training that explains both the purpose and use of energy-control procedures.
- Affected workers must also be able to recognize when an energy-control procedure is being used and understand the purpose of the procedure.

WRITTEN ENERGY CONTROL PLAN

- Towards that end, each organization’s written Energy Control Program will specify the particular color and/or style of the designated lockout locks and tags.
- The use of these particular locks and tags is reserved for use as part of a lockout/tagout operation. They may not be used for any other purpose.
- An affected worker describes a benefit to specific locks and tags: “Because our lockout operations utilize a very specific type of lock and tag, it’s easy to recognize when any equipment or process has been locked out.”
- Perhaps most importantly, affected workers must understand the importance of not tampering with or removing lockout or tagout devices and never attempting to start or use equipment that has been secured with lockout or tagout devices.
- “If you find your machine locked out unexpectedly, and even if you think it shouldn’t be, never, never, never remove that lock yourself. That is a cardinal safety rule that you must never violate,” states another affected worker.
- To be clear, someone’s life depends on locked out equipment remaining de-energized.

ASSISTING AUTHORIZED EMPLOYEES

- Although affected workers don't perform lockout procedures, one of your duties as an affected worker may be to provide assistance to an authorized employee performing a lockout when requested.
- For example, you may be asked to help shut down the equipment or process in the proper sequence or by following a standard operating procedure.
- Once the lockout/tagout has been installed, you may also be asked to help the authorized worker verify its effectiveness by attempting to start the equipment using its normal operating controls. This is especially true when the controls are located out of sight of the equipment being locked out.
- Testing or "trying" the lockout to ensure that the equipment will not start, and/or verifying that electrical components are deenergized, is a critical step in every lockout/tagout procedure.

THE NEED FOR COMMUNICATION

- Clear communication between the authorized employee and any affected employee is critical to ensure a successful lockout operation is completed without incident.
- This is why affected employees will be informed of a pending lockout before any lockout/tagout devices are installed.
- This prevents an affected worker from being surprised by an inoperative machine and unwittingly trying to restart it while it is still being serviced.
- Once the service work is successfully completed and all lockout/tagout devices have been removed, the affected workers will be informed that the equipment has been returned to service.
- Understanding that they will be informed when their equipment has been returned to service is an additional safeguard to prevent equipment operators from returning to work prematurely.
- "I always want to be productive and return to work as soon as possible. Knowing that I'll be informed when everything has safely been returned to service keeps me from having to constantly check up on it or possibly try to start it up too soon," remarks an affected worker.
- Affected employees will receive retraining whenever there are changes in job assignments, machinery, or processes that present a new hazard or new energy control procedures.
- Retraining is also necessary if an employer has reason to believe that shortcomings exist in an affected worker's knowledge related to a lockout procedure that affects them.

LOCKS AND TAGS

- Even though affected employees are prohibited from removing or tampering with the locks and tags used in the lockout process, they need to be familiar with these devices and have a basic understanding of how they are used.
- Be aware that all locks and tags used for controlling hazardous energy must be approved by your company and must not be used for any other purpose. These must be consistent in color, shape, or size so you can easily recognize them.
- Lockout devices are attached to energy-isolating devices such as circuit breakers, disconnect switches, and line valves to physically prevent the transmission or release of hazardous energy.
- You may encounter situations when more than one person is working on locked out equipment. When this is the case, each employee places his or her own lock and tag onto a multiple-lock hasp, group lock box, or similar device.
- Information contained on a tag is critical, especially in the event of an emergency.
- "You can learn a lot by looking at the lockout tag," states an affected worker. "First of all, it will identify the person who placed it. This is the only person who can remove it. The tag may also show the date the work began and the expected completion date."
- Keep in mind that no matter what information is contained on a tag, just seeing one on a machine or process indicates that the equipment is shut down and must only be returned to service by authorized personnel.

CONCLUSION

- Lockout/tagout is a critical safety process, and all workers must be able to recognize when a lockout/tagout is taking place and understand they are not permitted to remove locks or tags or attempt to re-start equipment that has been locked out.
- If you are an affected worker, never lose sight of the importance of clear communications and maintaining an understanding of the lockout process any time this type of work is being performed on your equipment or in your work area.

LOCKOUT/TAGOUT FOR AFFECTED WORKERS

ANSWERS TO THE REVIEW QUIZ

1. a

2. a

3. b

4. a

5. a

6. b

7. a

8. a

LOCKOUT/TAGOUT FOR AFFECTED WORKERS

REVIEW QUIZ

Name _____ Date _____

The following questions are provided to determine how well you understand the information presented in this program.

1. Lockout/tagout must be performed any time a worker is potentially exposed to injury from the inadvertent startup of equipment or unintentional release of hazardous energy.
 - a. True
 - b. False

2. OSHA's standard categorizes three types of workers as related to lockout/tagout operations: Authorized Workers, Affected Workers, and Other Workers.
 - a. True
 - b. False

3. Affected workers are the workers who perform lockout/tagout procedures and are the only ones permitted to do so.
 - a. True
 - b. False

4. Affected workers must be able to recognize when an energy-control procedure is being used and understand the purpose of the procedure.
 - a. True
 - b. False

5. Each organization's written Energy Control Program will specify the particular color and/or style of the designated lockout locks and tags.
 - a. True
 - b. False

6. Affected workers cannot provide any assistance to an authorized employee who is performing a lockout.
 - a. True
 - b. False

7. Once the service work is successfully completed and all lockout/tagout devices have been removed, the affected workers will be informed that the equipment has been returned to service.
 - a. True
 - b. False

8. Lockout devices are attached to energy-isolating devices such as circuit breakers, disconnect switches, and line valves to physically prevent the transmission or release of hazardous energy.
 - a. True
 - b. False