

# **Instructor's Guide**

## **"LOCK-OUT/TAG-OUT" Secure Safely**

### **Training for THE OSHA LOCK-OUT/TAG-OUT STANDARD**

The Control of Hazardous Energy (Lockout/Tagout), Title 29 CFR Part 1910.147

### **WARRANTY/DISCLAIMER**

Advice, graphics, images and information contained in this video is presented for general educational and information purposes and to increase overall safety awareness. It is not intended to be legal, medical or other expert advice or services, and should not be used in place of consultation with appropriate professionals. The information contained in this video should not be considered exhaustive and the viewer should seek the advice of appropriate professionals.

In no event shall Atlantic Training and its trustees, officers and employees be liable for any liability, loss, injury or risk (including, without limitation, incidental and consequential damages, personal injury/wrongful death, lost profits or damages) which is incurred or suffered as a direct or indirect result of the use of any of the material, advice, guidance or services on this video, whether based on warranty, contract, tort, or any other legal theory. ATLANTIC TRAINING TO THE FULLEST EXTENT PERMITTED BY LAW, DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OF THIRD PARTIES' RIGHTS AND FITNESS FOR PARTICULAR PURPOSE.

# **TABLE OF CONTENTS**

## **Introduction**

- Background
- Course Outline
- Course Review

## **Preparing for the Session**

- Structuring the Presentation
- Creating the Environment / Setting up the Session

## **Facilitating the Session**

- Getting Started
- Facilitating the Discussion
- Review Learning Outcomes

## **Core Curriculum**

- Section 1: Purpose of Program, Responsibilities & Training
- Section 2: Energy Sources & Energy Control Devices
- Section 3: Preparation for Lockout / Tagout
- Section 4: Restoration of Energy
- Section 5: Special Circumstances
- Section 6: Periodic Inspections & Program Review

## **Course Review**

- Key Points to Remember

## **Supplemental Resources**

- **Appendix A:** Power Point Presentation
- **Appendix B:** Quiz
- **Appendix C:** Answer Key
- **Appendix D:** Training Certificate

# Introduction

The instructor guide is designed to be a comprehensive tool for facilitating the course. Thoroughly reviewing this document, as well as all related course materials and resources, will prepare you to teach the course.

## **Background**

Lockout / Tagout is required in general industry employment where servicing and maintenance of machines and equipment could cause injury to employees due to unexpected startup or release of stored energy. Such situations could occur when repairing electrical circuit, cleaning or oiling machinery with moving parts, or clearing jammed mechanisms.

Lockout is not necessary during normal production operations provided no guards are removed and employees are not placing any part of their body in a danger zone. Normal production operations are defined as the machine performing its intended function.

## **Course Outline**

This course is organized by sections. Within each section there may be multiple lessons.

### **The sections in this course are as follows:**

- Purpose of Program, Responsibilities & Training
- Energy Sources & Energy Control Devices
- Preparation for Lockout / Tagout
- Restoration of Energy
- Special Circumstances
- Periodic Inspections & Program Review

## **Course Review**

These materials are to be used as guidance for facilitating the presentation. As with any educational program, the facilitator should go through the entire program at least once

to become familiar with the content and make sure the program is consistent with company policy and directives.

## **Preparing for the Session**

### **Structuring the Presentation**

- Share the learning objectives with the participants.
- Determine target audience to adjust training if needed.
- Establish plan to actively involve participants in the learning experience.
- Practice training techniques to build rapport with audience.

### **Creating the Environment / Setting up the Session**

- Confirm the training dates, location, and number of participants.
- Ensure the room is set up properly, e.g., tables and chairs are arranged to maximize whole-class and small group interaction without participants needing to turn chairs around, projectors do not block participants' line of sight, flip charts are convenient to you and visible to participants, and so forth.
- Start on time and stay on track. Keep exercises within their time limits. End discussions when they cease to be productive.

# Facilitating the Session

## Getting Started

- Introduce yourself as the session leader.
- Circulate the session roster before the training begins.
- Introduce the title of the program (Secure Safely) and begin playing the LO/TO training video.
- If you are using the DVD version of the course you have several options as to how you can move through the program and what employees see.
- The DVD menu has three "selection bars":
  - "Play"
  - "Scene Index"
  - "Contact Info"
- To just play the program from beginning to end, select "Play".
- All of our DVDs, both English and Spanish, are subtitled (similar to closed captioning). If there are hearing impaired employees participating in your training session, or you want people to be able to read the program narration as well as hear it, push the "subtitle" button on your DVD player's remote control or the player's control panel. A print version of the narration will then appear on the screen as the video plays.

## Facilitating the Discussion

- After the program has been shown, it is time for the group discussion on the information contained in the session.

- The instructor facilitates the activities and guides the conversation so that learners take away the ability to apply that knowledge in the field and internalize best practices.
- Closely monitor group activities. Walk among groups as they work; answer questions and offer guidance as appropriate. Give constructive feedback during the share-out sessions and discussions.

### **Review Learning Outcomes**

- Check to make sure that all attendees signed the session roster.
- Ensure that each participants completes end of course quiz.
- Distribute course certificates

## **Core Curriculum**

Slide 4

## Section 1

Purpose of Program, Responsibilities & Training

### Employer Responsibilities

- Establish energy-control procedures
- Train employees on the energy-control program
- Inspect these procedures periodically



### Facilitation Guidance:

The lockout / tagout standard establishes the employer's responsibility to protect employees from hazardous energy sources on machines and equipment during service and maintenance.

**Employers:** Employers must establish an energy-control program to ensure that employees isolate machines from their energy sources and render them inoperative before any employee services or maintains them.

**As part of an energy-control program, employers must:**

- Establish energy-control procedures for removing the energy supply from machines and for putting appropriate lockout or tagout devices on the energy-isolating devices to prevent unexpected reenergization.
- Train employees on the energy-control program, including the safe application, use, and removal of energy controls; and
- Inspect these procedures periodically (at least annually) to ensure that they are being followed and that they remain effective in preventing employee exposure to hazardous energy.

**Energy control procedures must provide employees with the following information:**

- A statement of how to use the procedures;
- Specific procedural steps to shut down, isolate, block, and secure machines;
- Specific steps designating the safe placement, removal, and transfer of lockout/tagout devices and identifying who has responsibility for the lockout/tagout devices; and
- Specific requirements for testing machines to determine and verify the effectiveness of lockout devices, tagout devices, and other energy-control measures.

**An employer should not have the same lockout / tagout procedure for all machines.**

Training must ensure that employees understand the purpose, function, and restrictions of the energy-control program. Employers must provide training specific to the needs of “authorized”, “affected”, and “other” employees.

**Slide 5**

## Section 1

Purpose of Program, Responsibilities & Training

### Employee Responsibilities

#### Authorized Employees

- Are those responsible for implementing the energy-control procedures or performing the service or maintenance activities.

#### Need training in the following:

- Hazardous energy source recognition;
- The type and magnitude of the hazardous energy sources in the workplace.
- Energy-control procedures, including the methods and means to isolate and control those energy sources.



**Facilitation Guidance:**

“**Authorized**” employees are those responsible for implementing the energy-control procedures or performing the service or maintenance activities. They need the knowledge and skills necessary for the safe application, use, and removal of energy-isolating devices.

**They also need training in the following:**

- Hazardous energy source recognition;
- The type and magnitude of the hazardous energy sources in the workplace; and
- Energy-control procedures, including the methods and means to isolate and control those energy sources.

**Slide 6**

## Section 1

Purpose of Program, Responsibilities & Training

**Affected Employee**

- Who operate the relevant machinery or whose jobs require them to be in the area where service or maintenance is performed.

**Need to know the following:**

- Recognize when the energy-control procedure is being used
- Understand the purpose of the procedure
- Understand the importance of not tampering with lockout or tagout devices and not starting or using equipment that has been locked or tagged out.



6.

**Facilitation Guidance:**

“**Affected**” employees (usually machine operators or users) are employees who operate the relevant machinery or whose jobs require them to be in the area where service or maintenance is performed. These employees do not service or maintain machinery or perform LO/TO activities.

Affected employees must receive training in the purpose and use of energy-control procedures.

**They also need to be able to do the following:**

- Recognize when the energy-control procedure is being used,
- Understand the purpose of the procedure, and
- Understand the importance of not tampering with LO/TO devices and not starting or using equipment that has been locked or tagged out.

## Section 1

Purpose of Program, Responsibilities & Training

### Other Employee

- All other employees whose work operations are or may be in an area where energy-control procedures are used must receive training regarding the energy-control procedure and the prohibition against removing a lockout or tagout device and attempting to restart, reenergize, or operate the machinery.



7.

### Facilitation Guidance:

All other employees whose work operations are or may be in an area where energy-control procedures are used must receive training regarding the energy-control procedure and the prohibition against removing a lockout or tagout device and attempting to restart, reenergize, or operate the machinery.

In addition, if tagout devices are used, all employees must receive training regarding the limitations of tags.

## Slide 8

## Section 1

Purpose of Program, Responsibilities & Training

### When is training necessary?

- Must provide initial training before starting service and maintenance activities and must provide retraining as necessary.

### Must provide retraining for all authorized and affected employees whenever there is a change in the following:

- Job assignments
- Machinery or processes that present a new hazard
- Energy-control procedures



8.

### Facilitation Guidance:

The employer must provide initial training before starting service and maintenance activities and must provide retraining as necessary. In addition, the employer must certify that the training has been given to all employees covered by the standard.

### Employers must provide retraining for all authorized and affected employees whenever there is a change in the following:

- Job assignments
- Machinery or processes that present a new hazard, or
- Energy-control procedures.

Retraining also is necessary whenever a periodic inspection reveals, or an employer has reason to believe, there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

## Slide 9

## Section 2

Energy Sources & Energy Control Devices

### Energy Sources

- It is important to identify all energy sources inside a machine or equipment.

**Electrical, Mechanical, Pneumatic, Hydraulic, Stored, Chemical, Thermal**

### Two types of energy:

- **Kinetic energy** - force caused by the motion of an object
- **Potential energy** - force stored in an object that is not moving



9.

### Facilitation Guidance:

Energy Source – When LO/TO is performed, it is important to identify all energy sources inside a machine or equipment. This is not limited to electrical energy, the most common source; it also must include mechanical energy, pneumatic energy, hydraulic energy, stored energy, chemical and thermal energy.

### There are two types of energy:

**Kinetic energy** is the force caused by the motion of an object. A spinning wheel is an example of kinetic energy.

**Potential energy** is the force stored in an object that is not moving. A spring under tension is an example of potential energy. Whenever any part of the body is exposed to these types of energy while servicing or maintaining equipment, LO/TO procedures must be followed.

## Slide 10

## Section 2

Energy Sources & Energy Control Devices

### What is an energy-isolating device?

- A device that **physically** prevents transmission or the release of energy during service and maintenance activities.

### Examples of energy isolating devices include:

- Circuit breakers
- Disconnect switches
- Line valves
- Safety blocks.



10.

### Facilitation Guidance:

An energy-isolating device is a device that **physically** prevents transmission or the release of energy. The primary way to prevent the release of hazardous energy during service and maintenance activities is by using energy-isolating devices such as manually operated circuit breakers, disconnect switches and line valves and safety blocks.

## Slide 11

## Section 2

Energy Sources & Energy Control Devices

### Lockout

- Requires use of a lock or other lockout device to hold the energy-isolating device in a safe position to prevent machinery from becoming reenergized.
- If it is possible to lock out an energy-isolating device, employers must use lockout devices unless they develop, document, and use a tagout procedure that provides employees with a level of protection equal to that provided by a lockout device.



11.

### Facilitation Guidance:

Lockout requires use of a lock or other lockout device to hold the energy-isolating device in a safe position to prevent machinery from becoming reenergized.

If it is possible to lock out an energy-isolating device, employers must use lockout devices unless they develop, document, and use a tagout procedure that provides employees with a level of protection equal to that provided by a lockout device.

## Slide 12

## Section 2

Energy Sources & Energy Control Devices

### Tagout

- Sometimes it is not possible to lock out the energy-isolating device associated with the machinery.
- You must securely fasten a tagout device as close as safely possible to the energy-isolating device in a position where it will be immediately obvious to anyone attempting to operate the device.



12.

### Facilitation Guidance:

Sometimes it is not possible to lock out the energy-isolating device associated with the machinery.

In that case, you must securely fasten a tagout device as close as safely possible to the energy-isolating device in a position where it will be immediately obvious to anyone attempting to operate the device.

## Slide 13

## Section 2

Energy Sources & Energy Control Devices

### Tagout

- The tag alerts employees to the hazard of reenergization and states that employees may not operate the machinery to which it is attached until the tag is removed in accordance with an established procedure.



13.

### Facilitation Guidance:

The tag alerts employees to the hazard of reenergization and states that employees may not operate the machinery to which it is attached until the tag is removed in accordance with an established procedure.

## Slide 14

## Section 2

Energy Sources & Energy Control Devices

### Tagout Limitations:

- Tags are essentially warning devices and do not provide the physical restraint of a lock.
- Tags may evoke a false sense of security.



14.

### Facilitation Guidance:

#### Tagout Limitations:

- Tags are essentially warning devices and do not provide the physical restraint of a lock.
- Tags may evoke a false sense of security.

## Slide 15

## Section 2

Energy Sources & Energy Control Devices

### What are the requirements for lockout/tagout devices?

- Lockout and tagout devices must be the only devices used for controlling energy and must not be used for other purposes.



15.

### Facilitation Guidance:

Lockout and tagout devices must be the only devices used for controlling energy and must not be used for other purposes.

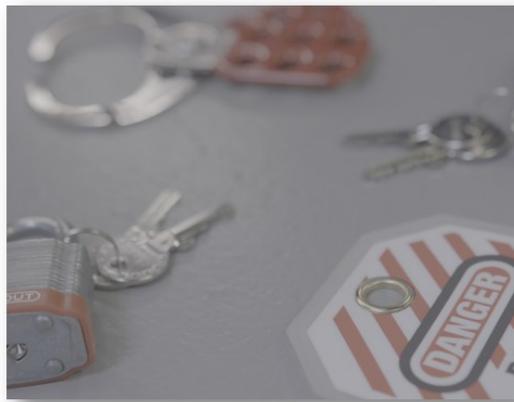
## Slide 16

## Section 2

Energy Sources & Energy Control Devices

**LO/TO devices must have the following characteristics:**

- Durable enough to withstand workplace conditions.
- Standardized according to color, shape, or size. Tags must be legible and offer employees clear instruction such as: “Do Not Start”, “Do Not Open”, or “Do Not Operate”.



16.

**Facilitation Guidance:**

**In addition, they must have the following characteristics:**

- Durable enough to withstand workplace conditions
- Standardized according to color, shape, or size. Tags must be legible and offer employees clear instruction such as: “Do Not Start”, “Do Not Open”, or “Do Not Operate”

## Slide 17

## Section 2

Energy Sources & Energy Control Devices

### LO/TO devices must have the following characteristics:

- Substantial enough to minimize the likelihood of premature or accidental removal. Lockout devices must have structural integrity to require excessive force or specialized tools to remove them.
- Tagout attachments must be non-reusable, self-locking, and non-releasable, with a minimum unlocking strength of 50 pounds. Tags must be attachable by hand, and the device for attaching the tag should be a one-piece nylon cable tie or its equivalent so it can withstand all environments and conditions.



17.

### Facilitation Guidance:

- Substantial enough to minimize the likelihood of premature or accidental removal. Lockout devices must have structural integrity to require excessive force or specialized tools to remove them.
- Tagout attachments must be non-reusable, self-locking, and non-releasable, with a minimum unlocking strength of 50 pounds. Tags must be attachable by hand, and the device for attaching the tag should be a one-piece nylon cable tie or its equivalent so it can withstand all environments and conditions.

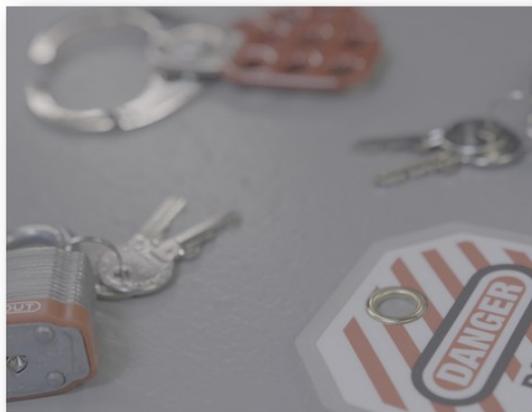
Slide 18

## Section 2

Energy Sources & Energy Control Devices

**LO/TO devices must have the following characteristics:**

- Labeled to identify the specific employees authorized to apply and remove them.



18.

**Facilitation Guidance:**

- Labeled to identify the specific employees authorized to apply and remove them.

## Slide 19

## Section 3

Preparation for Lockout / Tagout

**Before beginning service or maintenance, the following steps must be accomplished:**

- Prepare for shutdown
- Shut down the machine
- Disconnect or isolate the machine from the energy source(s)
- Apply the lockout or tagout device(s) to the energy-isolating device(s)



19.

### Facilitation Guidance:

**Before beginning service or maintenance, the following steps must be accomplished in sequence and according to the specific provisions of the employer's energy control procedure:**

- Prepare for shutdown;

- Shut down the machine;
- Disconnect or isolate the machine from the energy source(s);
- Apply the lockout or tagout device(s) to the energy- isolating device(s);

## Slide 20

### Section 3

Preparation for Lockout / Tagout

- Release, restrain, or otherwise render safe all potential hazardous stored or residual energy. If a possibility exists for reaccumulation of hazardous energy, regularly verify during the service and maintenance that such energy has not reaccumulated to hazardous levels;
- Verify the isolation and deenergization of the machine.

**Facilitation Guidance:**

- Release, restrain, or otherwise render safe all potential hazardous stored or residual energy. If a possibility exists for reaccumulation of hazardous energy, regularly verify during the service and maintenance that such energy has not reaccumulated to hazardous levels; and
- Verify the isolation and deenergization of the machine.

## Section 4

Restoration of Energy

**When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps must be taken:**

- Check Equipment
- Check Employees
- Verify Controls are in Neutral
- Remove Lockout/ Tagout Devices
- Notify Employees
- Re-Energize



21.

### Facilitation Guidance:

**When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps must be taken:**

- **Check Equipment:** Make sure machinery or equipment is properly re-assembled. Inspect machinery or equipment to ensure removal of nonessential items.
- **Check Employees:** Make sure all employees are safely outside danger zones. Notify affected employees about the removal of lockout/tagout devices and that energy is going to be re-applied.
- **Verify that the controls are in neutral.**
- **Remove Lockout/ Tagout Devices:** Only the authorized employee who applied the lockout / tagout device may remove the device.
- **Notify Employees :** The authorized employee will notify all affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.
- **Re-Energize**

## Slide 22

## Section 5

Special Circumstances

### Testing of Systems or Equipment

- Clear the machine or equipment of tools and materials
- Remove employees from danger zones
- Remove lockout/ tagout devices
- Energize and proceed with testing or positioning
- De-energize all systems and re-apply energy control measures



22.

### Facilitation Guidance:

#### Testing of Systems or Equipment

Whenever authorized employees remove lockout / tagout devices to test or position machines and equipment the following sequence of actions must be followed;

- Clear the machine or equipment of tools and materials,
- Remove employees from danger zones,
- Remove lockout/ tagout devices,
- Energize and proceed with testing or positioning, and
- De-energize all systems and re-apply energy control measures.

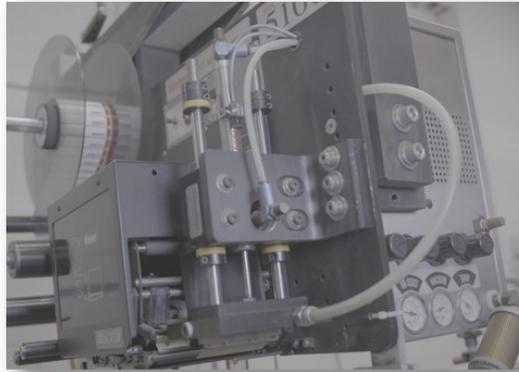
## Slide 23

## Section 5

Special Circumstances

### Outside Personnel / Contractors

- If an outside contractor services or maintains machinery, the onsite employer and the contractor must inform each other of their respective lockout or tagout procedures.
- The onsite employer also must ensure that employees understand and comply with all requirements of the contractor's energy-control program(s).



23.

### Facilitation Guidance:

#### Outside Personnel | Contractors

If an outside contractor services or maintains machinery, the onsite employer and the contractor must inform each other of their respective lockout or tagout procedures. The onsite employer also must ensure that employees understand and comply with all requirements of the contractor's energy-control program(s).

## Slide 24

## Section 5

Special Circumstances

### Group LO/TO: Multiple Employees

- When servicing and/or maintenance is performed by more than one person, each authorized employee must place his/her lock or tag on the energy isolating source.
- In cases where an energy control device cannot accept multiple locks a hasp or lock box may be used. If the equipment cannot be locked out, then each authorized employee must place his tag on the equipment.



24.

### Facilitation Guidance:

#### Group LOTO | Multiple Employees

When servicing and/or maintenance is performed by more than one person, each authorized employee must place his/her lock or tag on the energy isolating source. In cases where an energy control device cannot accept multiple locks a hasp or lock box may be used. If the equipment cannot be locked out, then each authorized employee must place his tag on the equipment.

## Slide 25

## Section 5

Special Circumstances

### Shift or Personnel Changes

- Employers must make sure that there is a continuity of lockout or tagout protection. This includes the orderly transfer of lockout or tagout device protection between outgoing and incoming shifts to control hazardous energy.
- When lockout or tagout devices remain on energy-isolation devices from a previous shift, the incoming shift members must verify for themselves that the machinery is effectively isolated and deenergized.



25.

### Facilitation Guidance:

#### Shift or Personnel Changes

Employers must make sure that there is a continuity of lockout or tagout protection. This includes the orderly transfer of lockout or tagout device protection between outgoing and incoming shifts to control hazardous energy. When lockout or tagout devices remain on energy-isolation devices from a previous shift, the incoming shift members must verify for themselves that the machinery is effectively isolated and deenergized.

Slide 26

## Section 5

Special Circumstances

### Emergency Removal Requirements

- LO/TO must only be removed by the Authorized Employee who affixed the lock/tag.



26.

### Facilitation Guidance:

#### Emergency Removal Requirements

Locks / Tags must only be removed by the Authorized Employee who affixed the lock/tag.

## Slide 27

## Section 5

Special Circumstances

**If it becomes necessary to remove a lock/tag that has inadvertently been left by an employee, the following steps must be followed:**

- Notify the person's supervisor
- Ensure that the person is not on the premises
- Attempt to contact him/her at home
- Management authorizes the removal of lock/tags according to the emergency removal procedure
- Document the removal activity
- Notify the Authorized Employee prior to his/her returning to work



27.

### Facilitation Guidance:

**If it becomes necessary to remove a lock/tag that has inadvertently been left by an employee, the following steps must be followed:**

- Notify the person's supervisor
- Ensure that the person is not on the premises
- Attempt to contact him/her at home
- Management authorizes the removal of lock/tags according to the emergency removal procedure
- Document the removal activity
- Notify the Authorized Employee prior to his/her returning to work.

## Slide 28

## Section 6

Periodic Inspections & Program Review

### What does a review entail?

- Employers are required to review their procedures at least once a year to ensure that they provide adequate worker protection.
- The periodic review inspection is intended to assure that employees are familiar with their responsibilities under the procedure and continue to implement energy – control procedures properly.



28.

### Facilitation Guidance:

Employers are required to review their procedures at least once a year to ensure that they provide adequate worker protection. As part of the review, employers must correct any deviations and inadequacies identified in the energy- control procedure or its application.

### What does a review entail?

The periodic review inspection is intended to assure that employees are familiar with their responsibilities under the procedure and continue to implement energy – control procedures properly.

## Slide 29

## Section 6

Periodic Inspections & Program Review

**The inspector, who must be an authorized person not involved in using the particular control procedure being inspected, must be able to determine the following:**

- Employees are following steps in the energy control procedure
- Employees involved know their responsibilities under the procedure
- The procedure is adequate to provide the necessary protection, and what changes, if any, are needed.



29.

### Facilitation Guidance:

**The inspector, who must be an authorized person not involved in using the particular control procedure being inspected, must be able to determine the following:**

- Employees are following steps in the energy control procedure;
- Employees involved know their responsibilities under the procedure; and
- The procedure is adequate to provide the necessary protection, and what changes, if any, are needed.

## Slide 30

## Section 6

Periodic Inspections & Program Review

**In addition, the employer must certify that the designated inspectors perform periodic inspections. The certification must specify the following:**

- Machine or equipment on which the energy-control procedure was used
- Date of the inspection
- Names of employees included in the inspection
- Name of the person who performed the inspection



30.

### Facilitation Guidance:

**In addition, the employer must certify that the designated inspectors perform periodic inspections.**

**The certification must specify the following:**

- Machine or equipment on which the energy-control procedure was used,
- Date of the inspection,

- Names of employees included in the inspection, and
- Name of the person who performed the inspection

## Course Review

Slide 31

### Review

- **Program and Policy:** Procedures must be developed, documented and utilized for the control of potentially hazardous energy.
- **Training:** Training must be provided by employers to ensure that the energy control program is understood and that the knowledge and skills required for the safe, application, usage, and removal of energy controls are acquired by employees.
- **Equipment:** Use only approved LO/TO devices. Use correct tags that meet the OSHA standards. LO/TO devices must be removed by the employee who applied the device.
- **Procedure Steps:** Check detailed procedures for equipment, notify affected employees, shut down equipment properly, disconnect all primary energy sources, and verify the lockout.
- **Restoration of Energy:** Make sure equipment is properly re-assembled, notify affected employees, verify controls are in neutral, and remove LO/TO devices.
- **Periodic Inspection:** The employer must conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of the standard are being followed.

31.

**Facilitation Guidance:**

**Program and Policy:** Procedures must be developed, documented and utilized for the control of potentially hazardous energy.

**Training:** Training must be provided by employers to ensure that the energy control program is understood and that the knowledge and skills required for the safe, application, usage, and removal of energy controls are acquired by employees.

**Equipment:** Use only approved lockout tagout devices. Use correct tags that meet the OSHA standards. Lockout tagout devices must be removed by the employee who applied the device.

**Procedure Steps:** Check detailed procedures for equipment, notify affected employees, shut down equipment properly, disconnect all primary energy sources, and verify the lockout.

**Restoration of Energy:** Make sure equipment is properly re-assembled, notify affected employees, verify controls are in neutral, and remove lockout tagout devices.

**Periodic Inspection:** The employer must conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of the standard are being followed.

## Supplemental Resources