

Lockout Webinar Questions & Answers

Following Brady's recent webinar on Finding and Closing the Gaps in Your Lockout Tagout Program, our experts took the time to answer many of your questions:

Annual Audit

1. What is required in an annual audit?

The annual periodic inspections must be conducted by an "authorized employee" and contain at least two components:

- 1) an inspection of each energy control procedure and
- 2) a review of each employee's responsibilities under the energy control procedure being inspected

2. What documentation is required?

Employers must certify, in accordance with §1910.147(c)(6)(ii), that the prescribed periodic inspections have been performed. The certification must specify:

- 1) the machine or equipment on which the energy control procedure was used
- 2) the date of the inspection
- 3) the names of the employee(s) included in the inspection
- 4) the name(s) of the person(s) who performed the inspection

3. What is the difference between a review and audit?

Annual review, audit and inspections refer to the same requirement. (Additional information in question 1).

4. Is a second-person verifying equipment lockout considered an annual review of the procedure?

The second person who verifies must be authorized and must ensure all employees who maintain that equipment are knowledgeable about the procedure and responsibilities, and document that inspection.

5. Is the annual inspection an activity at a set time, or can it be done throughout the year?

It doesn't have to be all done all at once at the same time each year, but can occur throughout the year. (Additional information in question 1).

6. Do I need to do annual inspection for each machine in the plant floor?

Generally yes. However, OSHA does allow an employer to group separate, machine-specific LOTO procedures into one procedure for purposes of complying with the lockout tagout standard, as long as the machines or equipment in the group have the same/similar types of control measures. Energy control procedures used less than once a year need be inspected only when used.

7. Do all authorized employees need to participate in the annual review of each procedure?

The lockout tagout standard does require that the procedure being inspected to be reviewed with all authorized employees as part of the periodic inspection (reference 1910.147(c)(6)(i)(C)).

8. How formal or comprehensive is the annual audit?

In order to meet the review requirement, the auditor does not have to observe every authorized employee implementing the energy control procedure on the equipment on which they perform servicing/maintenance. Rather, the auditor performing the inspection may observe and talk with a representative number employees implementing the procedure in order to obtain a reasonable reflection of the servicing/maintenance practices being evaluated. To supplement this representative inspection sampling approach, additional supplemental reviews must still be performed with all of the authorized employees who are reasonably expected to implement the procedure during the year. Group meetings may be the most effective way to meet the review requirements and to re-establish employee procedure responsibilities and proficiency.

Lockout Tagout Application

9. How do you manage "exceptions" where a zero energy state cannot be used due to the task at hand?

This is covered under the OSHA 1910.147(f)(1). When lockout or tagout devices must be temporarily removed from the energy isolating device and the equipment energized to test or position the equipment, the following sequence of actions shall be followed:

- Clear the machine or equipment of tools and materials in accordance with paragraph (e)(1) of this section
- Remove employees from the machine or equipment area in accordance with paragraph (e)(2) of this section
- Remove the lockout or tagout devices as specified in paragraph (e)(3) of this section
- Energize and proceed with testing or positioning
- De-energize all systems and reapply energy control measures in accordance with paragraph (d) of this section to continue the servicing and/or maintenance

10. What are OSHA standards for lockout transition to other shifts and personnel?

Generally, the transfer of responsibility can be accomplished by the oncoming shift accepting control of the system involved prior to the release of control over the system by the off-going employees. The orderly transfer of personal LOTO devices between off-going and on-coming employees must ensure that there is no gap in coverage between the off-going employee's removal of her LOTO device and the on-coming employee's attachment of his device.

11. Can another worker be used as an active lockout?

No. The OSHA standard specifies mechanical devices and tags be used. I believe one of the OSHA cases or interpretations involves an authorized employee watching a switch while another authorized worker performs equipment maintenance. While convenient, OSHA specifically indicated that method is not as reliable as a mechanical device.

12. In a heavily automated industry, do you have advice for how to verify isolation?

Testing the electrical parts with a meter is recommended to verify isolation when testing at the control panel is not possible. The electrical disconnect that is wrongly isolated should be labeled and the procedure updated with the correct disconnect.

13. What are some recognized verification methods for ensuring air is bled out of a system besides gauges?

There are a few ways to verify pressure has been bled off. Noise is a common practice for compressed air lines since dump valves make a loud noise when releasing pressure. Depending on location of the isolation point, connecting air tools to the line to bleed off the line is another way to verify.

14. Doesn't OSHA require machines installed since 1990 to use lockout. Instead of tagout only?

Yes. Very rarely is tagout used. Most isolation points have been replaced to have a place that a lock can be placed or new devices have been developed to isolate.

Procedures

15. With thousands of machines and procedures, can I group machines that are similar to make the periodic inspection easier?

Yes, OSHA allows the grouping of same or similar equipment and procedures to ease the burden of periodic inspections. A best practice is to have a specific procedure for each individual machine, posted on or near the machine. Even if you have two identical machines, it's still preferred to have a procedure for both. This helps prevent confusion and demonstrates your thoroughness for inspectors. OSHA specifically outlines in their "Compliance Directive" that this level of detail is optimum and therefore allows the grouping of same/similar procedures and machines to encourage and maintain this high level of safety. The grouped machines must have the same or similar control measures.

16. Do you have any recommendations for successful and appropriate grouping?

Some companies develop generic energy control procedures and supplement them with checklists or appendices to address various, distinct equipment. This type of procedure may be considered a single energy control procedure (instead of multiple procedures) for inspection purposes, if all of the criteria for grouping same or similar equipment are met. However, if checklists or appendices address equipment that does not all use the same or similar types of control measures, the employer is required to divide machinery and equipment into groups based on same or similar types of control measures. Once this is accomplished, an employer may inspect and review the generic energy control procedure in conjunction with each distinct group of equipment referenced in the relevant checklists or appendices.

17. Are you required to have machine-specific procedures if all maintenance is done by contracted work only?

Yes, you need machine specific procedures for all equipment at your facility, even if contractors are the only ones authorized to work on the equipment. Even if there are no authorized employees, training is required for all employees and an annual procedure review needs to be complete, with any changes communicated to the contractors before servicing.

18. Could you provide a sample lockout procedure?

Download a sample procedure from Brady [here](#).

19. What are the exceptions for equipment that does not require a procedure?

To be exempt, equipment must meet all 8 criteria from 1910.147 (c)(4)(i):

1. No stored or residual energy
2. Single source readily identified and isolated
3. Single isolation point must de-energize to zero energy state
4. Lockout is performed for that point
5. Single lockout device
6. Exclusive control of authorized employee
7. No hazards to affected employees
8. No accidents involving the equipment

20. In what case does a single energy source NOT require a procedure?

This is typically all plug and play equipment, such as laptops, office equipment, fans, power tools, portable equipment, and anything that is hardwired and easily isolated with a single power cord or isolation point. Lockout tagout must still be followed, but you do not need a written procedure.

21. What software can be used to create procedures?

Brady offers [LINK@360 procedures software](#) to create, manage and audit visual lockout procedures.

22. If contractors are deemed as authorized, can they write procedures on behalf of the company they are working for?

Yes, although these procedures are best developed by employees familiar with the facility to ensure the correct disconnect is being used. Outside contractors unfamiliar with the equipment may miss an energy source if the authorized employees are not involved in verifying the procedures achieve a zero energy state.

Lockout Tagout Program

23. What are some lockout tagout requirements, versus best practices?

An annual review of lockout procedures is recommended, while some best practices include lockout tagout software, annual authorized/affected training (authorized will be more frequent), updating isolation points, management of change, contractor training and device inventory.

24. What is the responsibility of the host employer with regard to onsite contractors and lockout program implementation?

The host employer often will have greater familiarity with the energy control procedures used at the host facility. However, at 29 CFR §1910.147(f)(2)(i), the standard requires the host and contract employers to inform each other about their respective energy control procedures. Such coordination is necessary to ensure that both sets of employees will be protected from the hazardous energy. The contractor must take reasonable steps, consistent with its authority, to protect its employees if the contractor knows, or has reason to know, that the host's energy control procedures are deficient or otherwise insufficient to provide the requisite protection to its employees.

25. If you are only operating powerlifting equipment and docks is a lockout program required?

Yes, in the standard shipping and receiving areas or docks you will need machine specific written procedures for dock levelers and locks, battery chargers, palletizers, cranes, hoists, and anything hard wired to an electrical panel will need written lockout tagout procedures.

26. OSHA 1910.147 does not cover construction and agriculture employment. Where can I find information for these industries?

Construction has its own code of regulations so it is not covered in general industry. Agriculture CFR 1928 doesn't have any mention of lockout tagout, but the NIOSH backed National Ag Safety Database has lockout program recommendations. All the steps follow OSHA 1910.147. For implementing a program for agriculture, look at all the equipment in the facility and identify isolation points for each piece of equipment. Procedures should be created and devices, locks and tags should be bought to isolate the equipment during servicing. Train your authorized employees on when, how and why they need to lockout while servicing equipment.

27. Can you provide additional information on the minor tool adjustment clause?

OSHA has a few letters of interpretations that cover the minor servicing clause. I like to think of the lockout procedure as the first procedure created for your equipment to know how to completely remove all hazards. Minor tool adjustment should be used for routine tasks done by operators. Standard operating procedures should be created for any minor servicing to ensure the operator is not exposed to any hazards during minor servicing.

28. Do you have a lockout tagout offering specific for the food processing industry?

Brady offers lockout procedures and tags that are wash-down resistant and metal detectable. We can also assist in developing standard operating procedures for equipment during washdown operations.

29. What are the paperwork requirements for group, complex, or simultaneous operations?

Lockout tagout paper work requirements vary by company. Best practices are to have a log of all servicing that requires lockout with sign-out sheets of all isolation devices. Any permits needed to complete the service (hot work, confined space or working at heights) should be copied and kept with the service log.

Training

30. How can we get formal training class for our employees?

Brady offers a [Lockout Train the Trainer Course](#), as well as additional training opportunities available [here](#).

31. What is sufficient hands-on training documentation?

You need the authorized employee to sign off that the trainee fully understands the equipment and the lockout tagout program.

32. What is the regulatory requirement for LOTO training frequency?

Employees must be trained when they are hired, and then they must be retrained if there is a gap in behavior, knowledge or changes to procedures. Best practice is annual training that is completed with the annual review of equipment.

33. Is it a requirement to train contractors on our company's lockout program if they have their own program that they are trained on?

Yes, any contractor authorized to service equipment must meet your lockout programs requirements and be trained on the written programs procedures. Depending on your written program, contractors may need to group lockout with an authorized employee.

34. Who is responsible if outside contractors work on my equipment?

The responsibility is shared. The host employer often has greater familiarity with the energy control procedures used at the host facility, however, the standard requires the host and contract employers to inform each other about their respective energy control procedures. This coordination is necessary to ensure that both sets of employees are protected from the hazardous energy.

Devices

35. What is a good estimate for the total number of lockout devices needed for your lockout program?

First, decide how many stations or departments need a lockout device cabinet or board. Discuss with the authorized employees possible locations with LOTO devices to equipment and high equipment areas being key factors for LOTO station placement. Look at the high hazard equipment areas (boiler, chiller, generators, and facilities equipment rooms) and production departments. Count up the total number of devices required for all the written machine specific procedures in the desired area and order 10% of the total number of devices. If the boiler room has 50 pieces of equipment and 100 ball valve devices, the boiler LOTO station should have 10 ball valve devices. The need to lockout all equipment at your facility will never happen but using 10% as a starting point for the initial order will be a good starting point. Monitor the LOTO stations' devices with an inventory list to see if more devices need to be ordered after the initial order.

36. Do you have a collection of the various recommended lockout devices?

You can browse the LOTO section of our [website](#) or by downloading our [digital catalog](#).

 **To learn more about implementing a successful lockout program, visit [BradyID.com/lockouttagout](https://www.BradyID.com/lockouttagout)**

USA
Customer Service: 1-888-272-3946
Inside Sales: 1-888-311-0775
[BradyID.com](https://www.BradyID.com)

Canada
Customer Service: 1-800-263-6179
[BradyCanada.ca](https://www.BradyCanada.ca)

Mexico
Customer Service: 1-800-262-7777
Inside Sales: 1-800-262-7777 ext 177
[BradyLatinAmerica.com](https://www.BradyLatinAmerica.com)

