

LOCKOUT-TAGOUT-TRYOUT

An Energy Control Presentation

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Lockout-TAGOUT-try Out

Goals/Purpose

- Create an understanding of LOTO.
- Emphasize involvement of all team members.
- Identify the key items in your plan



Call It What You Want- It All Means The Same Thing

LOTO	ECP	LOCKOUT	TAGOUT
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- It requires the same basic elements
that begin with:
- Identifying - the forms of energy
 - Securing - the forms of energy
 - Verifying - that the energy is at a ZERO state



Forms of Energy

- ◆ Electric
- ◆ Hydraulic
- ◆ Pressure
- ◆ Kinetic
- ◆ Gravity
- ◆ Magnetic
- ◆ Nuclear



The Five Sections of the LO/TO Standard (29 CFR 1910.147) Most Often Cited by OSHA

1. Failure to develop, document, and utilize effective LO/TO procedures.
2. Failure to establish and implement a written program.
3. Failure to conduct periodic inspection of all energy control procedures.
4. Failure to provide employee training as described by OSHA.
5. Failure to clearly outline the scope and rules of YOUR LO/TO program.



29 CFR 1910.147(c)(4)(ii)


Specifically States - The Procedures Shall Clearly and Specifically Outline the Scope, Purpose, Authorization, Rules, and Techniques to Be Utilized for the Control of Hazardous Energy, and the Means to Enforce Compliance Including, but Not Limited To, the Following:

- A specific statement of the intended use of the procedure;
- Specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;
- Specific procedural steps for the placement, removal and transfer of lockout devices or tagout devices and the responsibility for them; and
- Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices tagout devices and other energy control measures.




After more than a decade of review the following are items identified as being lacking in the General Motors Program, based upon the 12/4/07 ruling to GM.

- GM's written lockout procedure failed to inform employees of the specific procedural steps to shut down and lockout a machine or piece of equipment;
- The procedure did not provide any information concerning the machines or equipment at the facility, such as the types and locations of machine or equipment operating controls;
- The procedure did not include the means to enforce compliance; and
- The procedure did not include the name(s)/job title(s) of affected employees and how to notify them. By stating that GM's procedure lacked a number of specifics set forth in Appendix A, the review commission concluded that employers are required to develop a written lockout procedure in accordance with the information contained in Appendix A.




PITFALLS AND ROADBLOCKS

- Time is always against you! The next accident can happen right now!
- Training is a requirement but also necessary to comply with the standard.
- Employee acceptance comes with employee involvement.
- Supervisor acceptance comes with sufficient understanding of what are the benefits of complying with the standards.




Benefits of Utilizing a LOTO System

- ◆ Saves lives, after all is that not what we do as safety professionals?
- ◆ Cut costs-medical, insurance, fines, production, downtime.
- ◆ Improves the product flow-
 - > Better maintenance times.
 - > More on-line time, less down time.




Develop, Document, & Utilize

When you create your plan involve all affected employees	When you write your plan remember once it is written – you must follow it	Audit the performance of your plan and revise it when you find a problem or make a change
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Creating a Energy Control Plan

- ◆ Develop and document your written LOTO procedures.
- ◆ There is sufficient boilerplate programs available. Utilize a system and customize it to your situation.
- ◆ Failure to customize is a tripping hazard.



Creating a Energy Control Plan, Cont'd

- ◆ Create a program that is equipment specific.
- ◆ Identify all sources/types of energy for that equipment.
- ◆ Identify control points (disconnects, breakers, valves, blocking/pinning, etc).
- ◆ Label magnitude (PSI, VAC, VDC, etc)



Creating a Energy Control Plan, Cont'd

- ◆ Create your program with procedural steps that correspond to labeling on equipment.
- ◆ The procedure must identify verification methods that verify **ZERO energy.**
- ◆ Operate controls, verify with meter, open drain valve and observe pressure release are all examples.



Creating a Energy Control Plan, Cont'd

- ◆ Training of employees and communication are big steps.
- ◆ Complete the identification phase prior to initiating training.
- ◆ Be prepared to make changes based upon input from the training!



Creating a Energy Control Plan, Cont'd

- ◆ Insist on consistency in application.
- ◆ If you wrote the plan and approved it- apply the plan.
- ◆ Don't be afraid to make changes when conditions arise.
- ◆ Create a method to initiate reviews and revisions



Creating a Energy Control Plan, Cont'd

- ◆ Procedures must identify three levels of employees-
 - Authorized
 - Affected
 - Other
- ◆ Each level requires a specified amount of training.



Creating a Energy Control Plan, Cont'd

- ◆ Authorized employees are the involved in the actual LOTO process and apply control measures.
- ◆ Affected employees are involved in working around the conditions created in a LOTO situation.
- ◆ Other employees could be forklift operators, crane operators, contractors, etc...



Creating a Energy Control Plan, Cont'd

- ◆ Provide employees with the essential equipment to comply with the LOTO procedure..
- ◆ Standardize and color code and require contractors to adhere to your program.
- ◆ There is suitable equipment available but there may be the situation that has not had the equipment created—brainstorm with your employees for solutions.



Creating a Energy Control Plan, Cont'd

- ◆ Certain additional standards may be required during LOTO---- NFPA 70E, confined space, mobile equipment.
- ◆ Don't forget to include these standards to avoid compliance issues.



Questions



I Hope You Enjoyed This
Presentation!

Paul N. Pantages

Thank You for Your Attention

