Company Name

Lockout/Tagout Plan

Updated

Disclaimer

This is a sample written program provided only as a guide to assist in complying with 29 CFR 1910.147, the U.S. Occupational Safety and Health Administration's (OSHA) Control of Hazardous Energy Standard. It is not intended to supersede the requirements detailed in the standards. Review the standard for individual requirements that apply to the specific situation. Employers will need to delete or add information relevant to their facility and operation to develop an effective, comprehensive lockout/tagout (LO/TO) Plan.

Although every effort has been made to provide accurate information within this program, the authors, organizations and individuals who assisted in its development make no representation or warranty, express or implied, as to the completeness, correctness or utility of the information and related materials.

The printer should not rely exclusively on this program to address specific questions that apply to a particular set of facts or circumstances. Business practices and operations can vary significantly from situation to situation. Suggested practices in this program and related materials should only be considered to be potential options for achieving improved performance and should not be considered to be the only means to reduce or eliminate exposures to hazardous energy.

It is assumed and intended that users of this material will exercise appropriate personal judgment and responsibility when utilizing or applying potential hazard abatement procedures and practices. The authors will not be held responsible for any misuse or incorrect use of the suggested procedures or practices depicted. Contact the PRINTING United Government Affairs department at govtaffairs@printing.org or 888-385-3588 with any questions.

1.0 INTRODUCTION 3
1.1 DEFINITIONS 3
1.2 COMPLIANCE WITH THIS PLAN 4
1.3 ENFORCEMENT OF EMPLOYEE COMPLIANCE 4
2.0 LOCKOUT/TAGOUT PROCEDURES 4
2.1 GENERAL LOCKOUT/TAGOUT REQUIREMENTS 4
2.2 ACTIVITIES EXEMPT FROM LOCKOUT/TAGOUT 5
2.3 GENERAL LOCKOUT PROCEDURES 6
2.4 EQUIPMENT REPOSITIONING 7
2.5 EQUIPMENT RESTORATION 7
3.0 SPECIFIC LOCKOUT PROCEDURES 8
4.0 LOCKS AND TAGS 8
5.0 GROUP LOCKOUT 8
6.0 REMOVAL OF LOCKS BY OTHERS 8
7.0 SHIFT/PERSONNEL CHANGES 9
7.1 DIRECT LOCK REPLACEMENT FOR CONTINUOUS SERVICING AND MAINTENANCE 9
7.2 JOB LOCK FOR NON-CONTINUOUS SERVICING AND MAINTENANCE 9
7.3 LOCK BOX FOR NON-CONTINUOUS SERVICING AND MAINTENANCE 10
8.0 CORD AND PLUG CONNECTED EQUIPMENT 11
9.0 EMPLOYEE TRAINING 11
9.1 INITIAL TRAINING 11
9.2 REMEDIAL TRAINING 12
10.0 PERIODIC INSPECTION AND ANNUAL CERTIFICATION 12
APPENDIX A: AUTHORIZED EMPLOYEES 13
APPENDIX B: INVENTORY OF EQUIPMENT REQUIRING LO/TO 15
APPENDIX C: EQUIPMENT SPECIFIC LO/TO PROCEDURES 18
APPENDIX D: INVENTORY OF CORD AND PLUG EQUIPMENT 21
APPENDIX E: ANNUAL CERTIFICATION FORM 23
APPENDIX F: LO/TO LOCK REMOVAL FORM 27
APPENDIX G: LOCK SIGN OUT FORM 29
APPENDIX H: INDEX 31

1.0 INTRODUCTION

This Lockout/Tagout (LO/TO) Plan establishes minimum requirements for the lockout of energy-isolating devices whenever maintenance or servicing is performed on equipment. Lockout/tagout procedures are used to ensure that equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any servicing and maintenance. These procedures are designed to eliminate unexpected energization, start-up of the equipment or a release of stored energy.

1.1 Definitions

Affected Employee — An employee whose job requires them to operate/use a machine or equipment, or work in an area in which service or maintenance is being performed under lockout. An "affected employee" becomes an "authorized employee" when that employee's duties include performing service or maintenance, and they can

demonstrate proficiency in performing the lockout or tagout sequence for specific pieces of equipment or machinery.

Authorized Employee — An employee who is certified to lockout or tagout machines or equipment to perform servicing or maintenance on that machine or equipment.

Authorized Supervisor — An employee who is responsible for maintaining control over the company lock, which is used on a lock box during shift transfers.

Company Lock — A lock that is used during shift transfer LO/TO to secure keys for lockout devices in the lock box. The authorized supervisor on each shift is to maintain control of the key for the company lock in a secure location that allows for use during the shift.

Energy-Isolating Device - A mechanical device that physically prevents the transmission or release of energy, such as the following:

- Manually operated electrical circuit breaker
- Disconnect switch
- Manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and in addition, no pole can be operated independently
- Line valve
- A block and any similar device used to block or isolate energy.

Simple push buttons, selector switches, and other control circuit type devices are not energy-isolating devices.

Job Lock — A lock or locks used during shift transfers LO/TO. The job lock is the first lock to be applied and the last lock to be removed from equipment. The company must designate a primary authorized employee on each shift who is responsible for maintaining control of the key for each Job Lock in a secure location that allows for use during the shift.

Lock Box — A storage device to be used during a shift transfer to which multiple locks can be applied and which holds keys for job locks.

Other Employee — An employee whose work operations are or may be in an area where energy control procedures may be performed.

Primary Authorized Employee — An employee on each shift, designated by the company, who is responsible for maintaining control of the key for each job lock in a secure location that allows for use during each shift.

1.2 Compliance with this Plan

All employees must comply with the procedures and restrictions required by this plan. Only authorized employees are permitted to perform lockout or tagout in accordance with this Plan. See Appendix A for a list of authorized employees.

Affected employees are employees who work around or with equipment and are not authorized to perform lockout. They are required to respect the lockout of energy sources, and they are prohibited from removing locks and tags, or starting locked/tagged equipment.

Any other employee who, from time to time, may be in areas where equipment is serviced or maintained, is also required to respect the lockout of energy sources, and is prohibited from removing locks and tags or starting locked/ tagged equipment.

1.3 Enforcement of Employee Compliance

Any authorized employee found not to be proficient in their responsibilities will be subject to remedial training or a change in job responsibilities.

Because of the potential life-threatening injuries that can occur from the accidental startup of equipment or a release of hazardous energy, the procedures in this plan will be strictly enforced. Escalating disciplinary action will be taken as necessary against both authorized and affected employees.

2.1 General Lockout/Tagout Requirements

1. All machines/equipment shall be locked out to protect against accidental or inadvertent activation or operation when such operation could cause injury to personnel. Lockout will also apply when working on or near exposed deenergized electrical circuits and parts.

2. [Company Name] provides locks, tags, covers, plug boxes and other hardware that meets OSHA's requirements. All LO/TO hardware will be made available through the _____[PERSON OR DEPARTMENT AND LOCATION].

3. Lockout devices shall be singularly identified. They shall be the only devices used for controlling energy and shall not be used for other purposes.

4. The lockout devices shall indicate, by use of a tag, the identity of the employee applying the devices.

5. Each lockout device shall only be removed by the employee who applied the device.

6. No employee shall attempt to operate any energy isolating device that is locked out.

7. If any employee is exposed to, or has contact with, parts of fixed electrical equipment or circuits that have been deenergized, the circuits energizing the parts shall be locked out and tagged in accordance with the requirements of OSHA's electrical standard. Only those employees who have received special training will be allowed to access any electrical circuits.

8. Only when disconnecting means other devices are incapable of being locked out, and until lockout capability is provided, will a tagout procedure (without lockout), be utilized. Under this circumstance, the machine/ equipment can never be left unattended during service and maintenance activity.

2.2 Activities Exempt from Lockout/Tagout

Equipment servicing and maintenance activities are exempt from lockout/tagout under certain circumstances as follows:

1. Work on cord and plug-connected electrical equipment if exposure to the hazards of unexpected energization or accidental start up is controlled by unplugging the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.

2. Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water or petroleum products when they are performed on pressurized pipelines, provided that continuity of service is essential.

3. Shutdown of the system is impractical, documented procedures are followed, and special equipment is used that will provide proven, effective protection for employees.

4. Minor Service and Maintenance — This exception may be used only by trained and authorized or affected employees for activities that are routine, repetitive and integral to the production process. The work will be performed using alternative measures that provide effective protection.

Every effort has been made to minimize the need for an employee to bypass normally guarded areas of equipment by use of tools and/or other devices. Employees are never allowed to touch a moving part on any machine or equipment under any circumstances. If any minor servicing and maintenance activity requires more than one employee, that activity cannot be considered exempt from the lockout/tagout requirement.

Minor service and maintenance activities include:

- Minor tool changes
- Minor equipment set up
- Cleaning or wiping blankets
- Cleaning or wiping plates
- Inspecting blankets, rollers and other press components
- Performing minor control/quality adjustments
- Cleaning bearers, cylinders, rollers
- Oiling/greasing lubrication points
- Mounting plates and blankets
- Clearing minor jams that do not require equipment disassembly

Alternative measures include:

- The Inch-Safe-Service Method, which is described as follows:
  (a) Before any minor servicing is performed, the machine must be stopped and its drive control must be on STOP/ SAFE. Servicing and/or maintenance, as defined in 29 CFR 1910.147(b), must not be conducted when the components of the machine are moving.
  (b) Consistent with the requirements contained in 29 CFR 1910.147 (f)(1) for testing or positioning a machine during servicing, procedures to inch a machine require all employees to be positioned so they are not endangered by the reenergization or startup of the machine. In addition, all tools or other implements used during the servicing must be positioned so that no hazard is created for the employees. On presses attended by more than one operator, or when it is possible for another employee to enter the frame of be obscured from view of the operator, suitable safety alerting signals must be employed.
  (c) By use of the INCH control, the components of the machine are moved to their desired position. Immediately thereafter, the drive control is placed on SAFE by each employee working in a hazardous area before beginning or resuming the minor servicing.
  (d) Steps (b) and (c) are repeated as necessary until the minor servicing is completed.
- Special tools such as remote oilers and specially designed servicing tools that prevent exposure to hazards
- Safeguarding devices — Several alternative means of safeguarding the hazardous portions of machines and equipment are presented by the national consensus standards, ANSI B11.19-1990 "Performance Requirements for Safeguarding" (or more recent edition) and UL/CSA/IEC/EN: 60950-1 "Information Technology Equipment — Safety."

Although ANSI B11.19-1990 "Performance Requirements for Safeguarding" (or more recent edition) is not all inclusive, it describes effective safeguarding alternatives for the protection of employees. The safeguards described include:

- Interlocked barrier guards
- Presence-sensing devices
- Other devices under the exclusive control of the employee

Interlocked barrier guards can be considered an acceptable alternative if they are designed control-reliable dual-channel hardwired circuits of industrially-rated components that satisfy the design features specified in ANSI B11.19 or UL/CSA/IEC/ EN: 60950-1 with a safety relay or safety PLC to ensure integrity and performance of the safeguarding system.

Under all circumstances, the individual must have exclusive personal control over the means to maintain the state of the control circuit in a protective mode.

2.3 General Lockout Procedures

All lockout/tagout procedures will follow this general procedure. Equipment may have one or more energy sources that must be isolated and deenergized before service or maintenance. Refer to Appendix B for the Inventory of Equipment Requiring Lockout/Tagout and Appendix C for the Equipment-Specific Lockout Procedures.

- Notify all affected employees that service or maintenance is required on a machine or equipment, and that the machine or equipment must be shut down and locked out to perform the service or maintenance.
- The authorized employee shall refer to the energy control procedures to identify the type and magnitude of energy the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.

- If the machine or equipment is operating, use the normal stopping procedure (depress the stop button, open switch, close valve, etc.) to shut it down.
- De-activate the energy-isolating device(s) so that the machine or equipment is isolated from the energy source(s).
- Stored or residual energy (such as in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, gas, steam, air or water pressure) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding, etc.
- Lock out the energy-isolating device(s) with assigned individual lock(s).
- Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

  Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.
- The machine or equipment is now locked out. Service or maintenance is permitted.

2.4 Equipment Repositioning

Some equipment may have to be repositioned before additional service or maintenance can be performed. Follow this procedure to reposition the equipment.

1. Check the equipment and the immediate area around the machine for nonessential items. Remove any items found. Also ensure that the equipment components (particularly guards) are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that all controls are in the "neutral" or "off" position.
4. Remove the lock or tag from the energy source. If multiple sources were isolated, remove the locks or tags in the required order.
5. Remove any blocking mechanisms. Some blocking mechanisms may require equipment reenergization for safe removal.
6. Reposition the equipment as necessary.
7. Once repositioning of the equipment is completed, follow the appropriate lockout procedure again.
8. Repeat this sequence as often as necessary.

2.5 Equipment Restoration

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

1. Check the machine or equipment and the immediate area around it to ensure that nonessential items have been removed and the machine or equipment components are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the machine or equipment. Ensure that the machine or equipment is operating correctly.
5. Notify affected employees that the servicing or maintenance is completed, and the machine or equipment is ready for use.

3.0 SPECIFIC LOCKOUT PROCEDURES

Equipment that requires specific equipment procedures is provided in Appendix C. Refer to those procedures directly.

4.0 LOCKS AND TAGS

Locks are the preferred method for isolating an energy source. Each lock must be individually keyed without duplicates. Authorized employees may use as many locks as necessary to carry out their responsibilities. The locks are identified with unique identifications to alert affected employees as to who applied them.

Tags are only used when locks cannot be applied to the energy source. The tags are designed to withstand general weathering and routine wear and tear, and substantial enough to prevent inadvertent or accidental removal. The tag's attachment is non-reusable, attachable by hand and self-locking (minimum unlocking strength of no less than 50 pounds). It has a general design equivalent to a one-piece, all environment-tolerant nylon cable tie. Tags are imprinted with the necessary cautionary language such as "Do Not Start."

5.0 GROUP LOCKOUT

When servicing or maintenance is performed by more than one individual, they will utilize procedures providing adequate protection for all authorized employees involved in the lockout. Each individual will follow the specific equipment procedure and will be able to lock out one or more energy sources per their responsibilities.

One authorized employee will have primary responsibility for the proper lockout of the equipment.

More than one authorized employee may also be required to lock out one energy source. In that event, each employee will attach his or her self-identifying lock on a multi-lock hasp.

The same procedures for verification of isolation, repositioning and restarting apply to the specific equipment lockout procedures.

6.0 REMOVAL OF LOCKS BY OTHERS

Lockout/tagout devices shall only be removed from an energy-isolating device by the employee who applied it. It may be necessary to remove a lock attached to an energy source by another authorized employee.

The Lockout/tagout device may only be removed by the authorized employee's supervisor once the following procedure has been met:

1. Notify the_____(TITLE) (e.g. safety administrator/ coordinator).
2. Verify that the authorized employee is not at the facility.
3. Make all reasonable efforts to contact the authorized employee to inform them that their lockout or tagout device has been removed.
4. Prior to lockout/tagout device removal, the authorized employee's supervisor shall personally inspect the complete machine to ensure the job has been completed, all machine guards have been replaced, safety systems are intact, tools are removed, and no other employees are exposed to unsafe conditions. If any questions arise as to the status of the job or the condition of equipment, the supervisor shall apply his or her lock until the authorized employee is contacted for additional information.
5. If the supervisor has removed the lock to put machine back into production, the form in Appendix F shall be completed and returned to the_____(TITLE) (e.g. Safety Administrator/Coordinator.

The supervisor will have the authorized employee whose lockout/tagout device was removed sign this form before they return to work.

7.0 SHIFT/PERSONNEL CHANGES

7.1 Direct Lock Replacement for Continuous Servicing and Maintenance

When servicing or maintenance activity must be extended into a following shift, where an on-coming authorized employee and an off-going authorized employee will be at the equipment at the same time, the following procedure is to be followed:

1. Prior to beginning servicing or maintenance during their shift, the off-going authorized employee(s) must follow the machine specific procedure in the LO/TO plan and apply their personal lock(s) to the energy source(s) lockout point(s)

2. If more than one employee is involved in the servicing and maintenance, a group lockout device shall be utilized.

3. The on-coming authorized employee(s) who will continue the service or maintenance on the equipment must first verify that the equipment has been properly locked out and that the start mechanism for the equipment is in the neutral position.

4. Upon verification, one of the following will occur:

   (a) The on-coming authorized employee(s) will apply their personal lock on the equipment energy source lockout point(s) before the off-going employee(s) removes their lock, or

   (b) The off-going authorized employee(s) who originally placed the lock on the equipment will remove the lock, and it will immediately be replaced with the lock of the on-coming authorized employee(s) who is to continue the service or maintenance on that equipment or machine for the following shift.

5. The on-coming authorized employee(s) will continue the servicing and maintenance task.

6. If the servicing and maintenance is completed during the shift, the on-coming authorized employee(s) must remove their personal lock from each energy source lockout point and follow the equipment-specific reenergization and startup procedures for the equipment as specified in the LO/TO program.

7. If the on-coming authorized employee(s) does not complete the servicing and maintenance, the lockout of the equipment will be continued by following Steps 1 - 4 in this procedure until the servicing and maintenance is completed. Once the servicing and maintenance is completed, the authorized employee(s) on duty must follow the equipment-specific reenergization and startup procedures for the equipment as specified in the LO/TO program.

7.2 Job Lock for Non-continuous Servicing and Maintenance

When servicing and maintenance must extend into the following shift, and there is a gap in time between those shifts such that an off-going authorized employee and an on-coming authorized employee are not at the equipment at the same time, a job lock may be used as a shift-transfer device, using the following procedure:

1. Once the equipment has been locked out by the off-going authorized employee(s) via the machine-specific procedure in the LO/TO plan, the authorized employee(s) must apply their personal lock to each energy-source lockout point with a group lockout mechanism. In addition, a job lock must also be applied to each energy source group lock mechanism by the shift's designated primary authorized employee.

2. At the end of their shift, the off-going authorized employee(s) will remove their personal lock, leaving the job lock(s) on the group lock mechanism on the energy control point(s).

3. The on-coming authorized employee who will continue the servicing or maintenance on the equipment must first verify that the equipment has been properly locked out and that the start mechanism for the equipment is in the neutral position.

4. Upon verification, the on-coming authorized employee(s) will apply their personal lock to the group lock mechanism on the energy control point(s) with the existing job lock(s) in place.
5. Once the on-coming authorized employee's lock(s) are applied, the servicing and maintenance will continue.
6. If the servicing and maintenance is completed during the shift, the on-coming authorized employee(s) will remove their personal lock.
7. The designated primary authorized employee will verify that the servicing and maintenance has been completed and the on-coming authorized employee(s) will remove their personal lock before the primary authorized employee removes the job lock.
8. The Authorized employee must follow the equipment specific reenergization and startup procedures for the equipment as specified in the LO/TO program.
9. If the on-coming authorized employee(s) does not complete the servicing and maintenance, the lockout of the equipment will be continued by following Steps 3 - 5 in this procedure until servicing and maintenance is complete, then follow Steps 6 - 8.

7.3 Lock Box for Non-continuous Servicing and Maintenance

When servicing and maintenance must extend into the following shift, but there is a period of time between those shifts such that an off-going authorized employee(s) and an on-coming authorized employee(s) are not at the equipment at the same time, then a lock box may be used as a shift transfer device. In this instance the following procedure is to be followed:

1. The primary authorized employee must lock out the equipment using the job lock(s) via the machine specific procedure as specified in the LO/TO plan.
2. The keys to the job lock(s) must be labeled appropriately and be placed in the Lock Box.
3. The authorized employee(s) performing servicing and maintenance will then put their personal lock(s) on the lock box.
4. The authorized supervisor must verify that the equipment has been locked out properly and place the company lock on the lock box.
5. Once the company lock has been applied to the lock box, the servicing and maintenance will begin.
6. If the off-going authorized employee(s) have not completed the servicing and maintenance activity at the end of the shift, they will remove their personal lock from the lock box. The authorized supervisor's lock will remain on the lock box and the job lock(s) will remain on the equipment.
7. The on-coming authorized employee who is to continue the servicing or maintenance on the equipment must first verify that the equipment has been properly locked out, the job locks are applied, and the equipment is in the neutral position.
8. The on-coming authorized employee's will apply their personal lock(s) and once applied, the servicing and maintenance will continue.
9. If the servicing and maintenance is completed during the shift, the on-coming authorized employee will remove their personal lock.
10. The authorized supervisor will verify that servicing and maintenance has been completed and remove the company lock from the lock box.
11. The primary authorized employee for the shift must remove the job lock(s) from the equipment before startup, and the authorized employee(s) must follow the equipment specific reenergization and startup procedures for the equipment as specified in the LO/TO program.
12. If the on-coming authorized employee(s) does not complete the servicing and maintenance, the lockout of the equipment will be continued by following Steps 6 - 8 in this procedure until the servicing and maintenance is completed, then Steps 9 - 11 are to be followed.

8.0 CORD AND PLUG CONNECTED EQUIPMENT

Refer to Appendix D for the Inventory of Cord and Plug Equipment. If service or maintenance is performed on cord-and plug-connected equipment the following procedure shall be performed:

1. Unplug equipment from its electrical socket.
2. Place a lockable cover over the plug and a lock on the cover during machine/ equipment service or maintenance.

9.0 EMPLOYEE TRAINING

9.1 Initial Training

Employees will be trained when they first work with equipment and when procedures or equipment change. The training is divided according to authorized, affected and other employees.

Training consists of the following:

1. Each authorized employee will receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control. They will be trained in the LO/TO procedures for any equipment they are specifically authorized to service.
2. Each affected employee will be instructed in the purpose and use of the energy control procedure. They will be prohibited from removing locks or tags and from starting or working on equipment.
3. All other employees whose work operations may be in an area where lockout procedures may be utilized, will be instructed about the procedure, and about the prohibition relating to attempts to reenergize equipment that is locked or tagged out.
4. When tagout systems are used, authorized and affected employees will also be trained in the following limitations of tags:

- Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
- When a tag is attached to an energy-isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored or otherwise defeated.
- Tags must be legible and understandable by all authorized employees, affected employees and all other employees whose work operations are in the area.
- Tags and their means of attachment must be made of materials that will withstand the environmental conditions encountered in the workplace.
- Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.
- Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

9.2 Remedial Training

Authorized and affected employees are required to complete remedial training whenever there is a change in their job assignments, a change in equipment or processes that present a new hazard, or a change in the energy control procedures.

Additional retraining will be conducted whenever an annual review reveals deficiencies, or there is reason to believe the employee's proficiency in using the lockout procedures is not adequate.

The retraining will be designed to reestablish employee proficiency and introduce new or revised control methods and procedures as necessary.

10.0 PERIODIC INSPECTION AND ANNUAL CERTIFICATION

An annual review and certification of the lockout procedures in this plan will be conducted to ensure the proper procedures are being followed.

An authorized employee other than the one(s) implementing the energy control procedure being inspected will perform the annual review. The periodic inspection will be conducted to identify and correct any deviations or inadequacies.

Where lockout is used for energy control, the annual review will include a review, between the inspector and each authorized employee, of that employee's responsibilities under the lockout procedure being inspected. Where tagout is used for energy control, the annual review will include a review of each authorized employee's responsibilities under the energy control procedures.

The individual conducting the review will certify that the annual review has been performed. (See Appendix E: Annual Certification Form.) The certification will identify the equipment on which the energy control procedure was being utilized, the date of the review, the employees included in the review and the person performing the review.

Appendix A: Authorized Employees

Employees Authorized to Perform Equipment Lockout or Tagout	
Employee	**Equipment Responsibility**

Appendix B: Inventory of Equipment Requiring LO/TO

Equipment	Type of Energy	Magnitude	Control Device	Location of Energy Source	Upstream Location of Energy Source

Equipment	Type of Energy	Magnitude	Control Device	Location of Energy Source	Upstream Location of Energy Source

Appendix C: Equipment Specific LO/TO Procedures

Note: Add photos as necessary to address lockout points.

Lockout Procedure	
Equipment:	*Manufacturer:*
Department:	*Serial # / ID:*

Type of Energy	Magnitude

Components controlled by Lockout:

The following lockout procedure is provided to assist employees in developing specific procedures to meet the requirements of this instruction. When the energy isolating devices are not lockable, tagout may be used.

Purpose. This procedure establishes the minimum requirements for the lockout of energy-isolating devices whenever maintenance or servicing is done on equipment. It must be used to ensure that the equipment is stopped, isolated from all potentially hazardous energy sources and locked out before authorized employees perform any servicing or maintenance where the unexpected energization or start-up of the equipment or release of stored energy could cause injury.

Compliance with This Program. All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. Authorized employees are required to perform the lockout in accordance with this procedure. All other employees, upon observing the equipment that is locked out for servicing or maintenance will not attempt to unlock, start, energize or use that equipment.

Sequence of Lockout

1. Notify all affected employees that servicing or maintenance is required on the equipment and that the equipment must be shut down and locked out to perform the servicing or maintenance.
2. The authorized employee will refer to the lockout procedure form to identify the type and magnitude of the energy the equipment utilizes, understand the hazards of the energy and know the methods to control the energy.
3. If the equipment is operating, use the normal stopping procedure to shut it down (e.g., depress stop button, open switch, close valve).
4. De-activate the energy isolating device(s) in the following order so that the equipment is isolated from the energy source(s).

Order	Locations	LO/TO Device Type

Place image of specific equipment locations and LO/TO devices

5. Lock out the energy isolating device(s) with assigned individual lock(s).
6. Stored or residual energy (such as that in capacitors, springs, elevated equipment members, rotating flywheels, hydraulic systems, and air, gas, steam or water pressure) must be dissipated or restrained by methods such as grounding, repositioning, blocking or bleeding down.

Types of stored energy	Methods to dissipate or restrain

7. Ensure that the equipment is disconnected from the energy source(s). First, check that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

Method of verifying the isolation of the equipment.	
Attempt to restart.	

8. The equipment is now locked out.

Restoring Equipment to Service

When the servicing or maintenance is completed, and the equipment is ready to return to normal operating condition, the following steps shall be taken.

1. Check the equipment or equipment and the immediate area around the equipment or equipment to ensure that nonessential items have been removed and that the equipment or equipment components are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the equipment in the order designated above, unless otherwise noted in the table below.

Type of Energy	Magnitude	Order
N/A	N/A	1
N/A	N/A	2

5. Notify affected employees that the servicing or maintenance is completed and the equipment is ready for use.

Appendix D: Inventory of Cord and Plug Equipment

Equipment	Type of Energy	Magnitude	Control Device	Location of Energy Source	Upstream Location of Energy Source

Appendix E: Annual Certification Form

Lockout/Tagout Annual Inspection Form

Equipment Name: _____

Equipment Procedure	Yes	No	Corrective Action
1. Are the type(s) and magnitude of energy correct?			
2. Are the identified lockout point(s) correct?			
3. Is the machine-specific LO/TO procedure correct?			

Date of review:_____Date of last review: _____

Other discrepancies noted and corrective actions taken: _____

_____

Employee Review Questions
1. Does the employee know where the written LO/TO procedures are located?
2. Does the employee notify affected employees and all other employees in the area before beginning the LO/TO procedure?
3. Can the employee identify all hazardous energy sources that need to be locked out?
4. Does the employee follow the proper LO/TO procedures for de-energizing the equipment?
5. Does the employee follow the proper steps for the placement, removal and transfer of LO/TO devices during shift change?
6. Does the employee use the proper methods to verify that the equipment was de-energized?
7. Before releasing the equipment from LO/TO, does the employee do the following: a) Inspect the equipment to ensure it is operationally intact? b) Ensure that all employees are safely positioned? c) Notify affected employees and all other employees in the area that the LO/TO devices have been removed?

Company Name:_____Revision Date: _____

Employee Review

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Conducting Inspection
Name:
Signature:

Employee Review

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Name:
Were any of the answers to Questions 1 - 7 under employee review "No"? Yes No
If "Yes" was indicated above, has the employee been retrained? Yes No

Employee Conducting Inspection
Name:
Signature:

Appendix F: LO/TO Lock Removal Form

Lockout/Tagout Removal Form

Supervisor:_____

Date of removal:_____

Authorized employee: _____

Phone number or method used to contact or attempt to contact authorized employee if not on site: _____

_____

_____

Time Contacted:_____AM/PM _____

Person spoken to: _____

Name of equipment where energy control device is to be removed: _____

Type of energy control device(s) being removed (e.g., lock or tag): _____

Explanation why the authorized employee's individual energy control device must be removed: _____

_____

_____

Safety Administrator's signature acknowledging awareness **Date/Time**

Supervisor's signature that machine was inspected and approved for production **Date/Time**

Employee's signature acknowledging lock or tag was removed **Date/Time**

Appendix G: Lock Sign Out Form

Lock Sign Out Form

When removing a lock from the Lockout/Tagout Station, authorized employees need print their name next to the number assigned to the selected lock. The authorized employee must complete a tag for each lock being used and attach it when the lock is applied.

Lock Number	Authorized Person (Print Name)	Date
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Appendix H: Index

(List each department and each piece of equipment along with the corresponding page number for the specific LO/TO procedure.)

Area/Equipment	Page #
Prepress or Premedia:	
Digital Services:	
Press Room:	
Mailing:	
Bindery:	
Shipping:	

[Company Name] **[Revision Date]**