### **SAMPLE**

## LOCK-OUT / BLOCK-OUT Plan

**FOR** 

# COMPANY NAME ADDRESS

Prepared by:	
Contact Name	
Title	
Phone Number:	
<b>Last Revision</b>	
Date:	
Signature	Date
To comply with appli	icable OSHA or CAL/OSHA standards, the CK-OUT/BLOCK-OUT Plan is to be implemented
-o- Porsonner or	
<b>Company Name</b>	
Address	

#### **Purpose**

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

Before <u>any</u> inspections or repairs are made on electrical equipment, power should be turned off at the switch box and the switch locked in the OFF position (locked-out). The switch or controls should be securely tagged to show that the equipment or circuits are being worked on.

In addition, mechanical parts generally must be mechanically blocked to prevent inadvertent movement during cleaning, servicing, or adjusting operations (block-out). If the machinery or equipment requires movement for the specific task, the hazard must be minimized through use of extension tools (extended swabs, brushes, scrapers, etc.). Employees must be properly trained in the use of such tools.

Machinery being inspected or repaired must be isolated from all potentially hazardous energy sources, which must be locked out and blocked out. The machinery must also be free from all residual or accumulated energy before employees may perform any servicing or maintenance activities, if the unexpected release of stored energy could cause injury.

#### Responsibility

It is the responsibility of management to approve all Hazardous Energy Control Procedures. However, it is the responsibility of all employees to follow the proper procedures. All employees will be instructed in the safety significance of the lock-out/block-out procedures as well as how to use those procedures by:

#### (Designated Person & Title)

Only authorized employees may lock-out/block-out machines or equipment. Authorized employees are identified on each *pre-determined procedures form*. (*designate key individuals to create a Hazardous Energy Control Procedures form for your business*)

In addition, affected employees or their job titles are identified on each Hazardous Energy Control Procedure form. They will be notified by the authorized employees whenever a lock-out or block-out will occur, as well as when the equipment is being placed back in service.

Approvals of Hazardous Energy Control Procedures can be given by the following people:

(List the Names & Titles)

#### **Equipment Survey**

(Name & Title), will make an initial survey of the plan or operation to identify all energy sources, including hidden ones.

To complete the survey, the designated individual must:

- 1) Physically inspect the premises;
- Study drawings and equipment manuals if necessary (in complicated operations, schematics of the disconnecting means may need to be drawn up by the plant's engineering department);
- 3) Identify:
  - > The equipment supplied;
  - Energy type and magnitude; and
- 4) Locate and mark the disconnecting means with a sign or sticker "LOCK-OUT HERE" to help direct workers to correct lock-out devices. *Use tags [or stickers]*

**Example:** Line #1, Press #4, Electrical 480 volts

#### **Training**

**Initial training** - Authorized employees are given training before any involvement in lock-out/block-out procedures. Affected employees will be given training at the time of hiring.

**Retraining** will occur under any of the following changes:

- Job assignments,
- Machinery or processes that present a new hazard, or
- Energy-control procedures.
- Also is necessary whenever a periodic inspection reveals, or an employer has reason to believe, that shortcomings exist in an employee's knowledge or use of the energy-control procedure.

A list will be maintained by (*Name & Title*) in order to certify that the training has been given to all employees covered by the standard. The certification will contain each employee's name and dates of training.

**Last training** was given to the (*Name Group*) on (*Date*) for lock-out/block-out for all equipment or machines by (*Name & Title*). In attendance was:

#### (List Names & Titles)

Authorized and affected employees are trained in all of the following topics: (List topics in training-see sample topics below)

- 1) Review of the requirements of tit. 8, S 3314, Control of Hazardous Energy
- 2) Types and magnitudes of energy sources
- 3) Limitations of tag-out
- 4) Lock-out and procedures for the isolation of energy sources
- 5) Block-out procedures
- 6) Safe maintenance and handling of extension tools (extended swabs, brushes, scrapers, etc.) when their use is necessary.
- 7) Procedures for removing locks and tags
- 8) Procedure for restoring energy

#### **Sample Procedure - Individual**

#### Preparation

- a) Obtain the proper Hazardous Energy Control Procedure (*location*) for the equipment or machine to be locked-out and blocked-out.
- b) Identify all affected employees by name (or job title) that may be involved in the impending lock-out and block-out. (*Location of the list*).

Authorized employees must be certain which switch, valve, or other energy-isolating device applies to the equipment being locked out. More than one energy source (electrical, mechanical, etc.) may be involved. Employees must first clear any questions concerning sources with their supervisors.

#### **Sequence for Lock-Out Procedure**

All equipment must be effectively blocked out in the following sequence to protect against accidental operation that could cause injury to personnel:

- 1) Issue a suitable lock to all maintenance personnel that has
  - > The individual worker's name or other identification; and

- > A key only for that worker.
- 2) Notify all affected employees that a lock-out is required and the reasons for the lock-out.
- Make sure no one is operating the machinery before turning off the power and that the machine operator is informed of the lock-out/block-out in advance.

  SUDDEN POWER LOSS COULD CAUSE AN ACCIDENT AND SERIOUS INJURIES.
- 4) Shut down operating equipment by normal stopping procedure (e.g., depress STOP button, open toggle switch).
- 5) Operate the switch, valve or other isolating devices so that the equipment is <u>isolated from its energy sources</u>.
- 6) Stored energy (e.g., in capacitors, springs, elevated machine members, rotating fly wheels, hydraulic systems, and air, gas, steam, or water pressure) must be dissipated or restrained by repositioning, blocking, bleeding down, etc.
- 7) Lock out the energy isolating devices with ASSIGNED INDIVIDUAL LOCKS.
- 8) Place NON-REUSABLE TAGS capable of enduring at least 50 lbs. The tags must state:
  - Reason for the lock-out
  - Name of the employee working on the equipment and how to reach the person.
  - Date and time the tag was placed

**Note:** Do not use tags alone! Use tags in addition to locks!

- 9) Test equipment to ensure that power is **OFF**:
  - First, ensure that no personnel are exposed; and
  - Next, check that all energy sources are disconnected and equipment is non-operational by checking the push button or other normal controls.

**Caution:** Return operating controls to the "neutral" or "off" position after the test.

10) The equipment is now locked-out.

#### **Restoring Equipment to Normal Production Operation**

1) After the job is finished and equipment is ready for normal operations, check the area to ensure that no one is exposed.

- 2) Ensure that all tools have been removed from the equipment and that all guards have been reinstalled.
- 3) When equipment is clear, remove all lock-out/block-out devices.
- 4) Operate the energy isolating devices to restore energy to the machine or equipment.

#### **SAMPLE PROCEDURE – GROUP**

Before any group lock-out/block-out is implemented, this procedure will be reviewed with all personnel affected by or authorized to implement the group lock-out/block-out event:

- 1) All Maintenance personnel must be issued a suitable lock (or locks) that has:
  - The individual worker's name or other identification; and
  - > A key only for that worker.
- 2) One authorized employee will coordinate the lock-out/block-out procedure for all group lock-out/block-out events.
- 3) Each employee will affix his or her lock or tag to the equipment being serviced or having maintenance performed on it.
- 4) No employee will be allowed to remove another employee's lock or tag. Each employee will remove his or her own lock or tag when his or her part of the operation is completed.
- 5) When service or maintenance will involve more than one shift, members of the off-going shift will remove their locks and tags as the members of the on-coming shift apply their locks and tags.
- When equipment has room for only one lock, the coordinator of the procedure will place the lock on the equipment and place the key in a cabinet. Each employee will affix his or her lock to the cabinet or box.

#### **OUTSIDE SERVICE OR CONTRACTOR PERSONNEL**

Outside servicing personnel must follow the same on-site procedures outlined in this plan. In addition, a signed permit will be completed for outside servicing personnel by: (Name & Title)

Affected employees of this company will be trained and notified of the proper procedures by (*Name & Title*)

#### **ANNUAL INSPECTION**

At least **annually**, the employer must conduct a periodic inspection of the energy control procedures for all machines and equipment. Only an authorized employee <u>other than</u> the one using the energy control procedure being inspected may perform the periodic inspection. A member of the Maintenance Staff may perform the inspection.

The periodic inspection must be conducted to identify and correct any deviations or inadequacies. The periodic inspection must include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected.

The certification must identify:

- The machine or equipment on which the energy control procedure was being utilized;
- 2) Date of the inspection
- 3) Employees included in the inspection; and
- 4) Person performing the inspection.

A copy of the certification will be kept in the (*location*).