



## **LOCKOUT TAGOUT PROGRAM**

**PURSUANT TO**

**CCR TITLE 8 SECTION 3314**

# Lockout Tagout Program

## **Purpose**

Chino Valley Unified School District (CVUSD) has established this program for the purpose of Control of Hazardous energy as required by OSHA lockout tagout standards. This program establishes the requirements for isolation of kinetic and potential electrical, chemical, thermal, hydraulic, pneumatic, gravitational, and any other recognized energy prior to the cleaning, repairing, servicing, setting-up, unjamming, and adjusting of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees.

- Reference: Cal OSHA Standard CCR T8 Section 3314.

## **Definitions**

### ***Authorized (Qualified) Employees***

A qualified person who locks out or tags out specific machines or equipment in order to perform cleaning, repairing, servicing, setting-up, and/or adjusting operations on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties including performing cleaning, repairing, servicing, setting-up and/or adjusting operations covered under this section.

### ***Affected Employees***

An employee whose job duties requires them to operate or use a machine or equipment on which cleaning, repairing, servicing, setting-up or adjusting operations are being performed under lockout or tagout, or whose job requires the employee to work in an area in which such activities are being performed under lockout or tagout.

### ***Other Employees***

Employees identified as those that do not fall into the authorized, affected or qualified employee category. Essentially, it will include all other employees. These employees will be provided instruction on what the program is and not to touch any machine or equipment when they see that it has been locked or tagged out.

## **Program Administrator**

The Director of Maintenance, Operations and Construction, in addition to the Supervisors of Maintenance, Operations and Construction have been assigned as the Program Administrator(s). The Program Administrator(s) have been qualified by training and / or experience to manage the requirements of the District's lockout tag out program.

## **Training**

### ***Authorized Employee Training***

All Authorized employees will be trained to use the applicable Lockout Tagout Energy Control Procedures (ECPs). The training will be provided to applicable new hires at time of initial hire. Retraining shall be held as often as determined necessary and when new processes and equipment deem the need to modify and/or develop existing or new ECPs.

Authorized personnel training will consist of:

1. Requirements of the District's Lock Out Tagout program
2. Review of Specific Procedures for machinery, equipment and processes
3. Location and use of the District's equipment-specific Energy Control Procedures
4. Applicable hazardous energy sources
5. Type and magnitude of the energy available in the workplace
6. The methods and means necessary for energy isolation and control
7. Clarification of any questions or concerns
8. Student demonstration of understanding of subject matter

### ***Affected Employee Training***

Applies to all support personnel that will or may be in areas where Authorized employees are performing Lockout Tagout activities.

Affected personnel training will consist of:

1. Purpose and use of the lockout procedures
2. Only trained and Authorized employees will repair, replace or adjust machinery, equipment or processes
3. Affected employees may not remove Locks, locking devices or tags from machinery, equipment or circuits
4. Prohibition relating to attempts to restart or re-energize machines or equipment which are locked out or tagged out.
5. Affected Level personnel will not participate in / assist Authorized personnel during Lock Out Tag Out activities.

### ***Other Employee Training***

Other employees will be made aware of the following:

1. Only trained and authorized Employees will performing or interact with any lockout tagout activities
2. Other Employees may not remove Locks, locking devices or tags from machinery, equipment or circuits

### ***Preparation for Lock and Tag Out Procedures***

A Lockout Tagout survey has been conducted to locate and identify all energy sources for applicable equipment and activities captured by this policy. The information gathered in this survey was used to develop ECPs. Additionally, dual or redundant controls have been identified and/or removed.

An Energy Control Procedure (ECP) has been developed for each piece of equipment and machinery that was identified in the survey as standardized. These ECPs describe the energy sources, location of isolation devices (disconnects, valves, etc), type of isolation device, special hazards and special safety procedures necessary to isolate such energy sources / hazards to bring the machinery or equipment to zero mechanical state. The ECPs will be verified at each use to ensure their effectiveness. If an ECP does not exist for a particular piece of equipment, machinery and process, one will be developed prior

to conducting work activities that will or may expose employees to hazardous energy. As repairs and/or renovations of existing systems are made, standardized controls will be used.

Equipment-specific ECPs are maintained electronically by the Program Administrator and all Authorized personnel have been provided electronic and / or hard copies of all applicable ECPs.

### ***Routine Maintenance & Machine Adjustments***

Lockout Tagout procedures may be suspended if equipment must be operating for proper adjustment. This rare exception may be used only by trained and qualified employees when specific procedures have been developed to safely protect employees from the hazards of the energized machinery or equipment. All consideration shall be made to prevent the need for an employee to break the plane of a normally guarded area of the equipment with their hands or other body parts, instead using extension tools and other devices.

1. Minor tool changes and adjustments, and other minor servicing activities, which take place during normal daily operations are not covered by the requirements of this program if they are routine, repetitive, and integral to the use of the equipment or machinery for production, provided that the work is performed using alternative measures which provide effective protection.
2. Work on cord and plug-connected electric equipment for which exposure to the hazards of unexpected energization or start up of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the work.
3. Where an employer has a uniform system with unique and personally identifiable locks designed for lockout, that are placed on the source of energy, incident prevention signs or tags are not required, but still may be used.

### ***Repetitive Process Machines***

CVUSD, at the time of development of this program, did not have any repetitive process machines. Regardless, the following policy will be retained in this program in the event that, for whatever reason, repetitive process machinery is acquired and incorporated into CVUSD work processes.

On repetitive process machines, such as numerical control machines, which require power or current continuance to maintain indexing and where repair, adjustment, testing, or setting-up operations cannot be accomplished with the prime mover or hazardous energy source disconnected, such operations may be performed under the following conditions:

1. The operating station where the machine may be activated must at all times be under the control of a qualified operator or craftsman.
2. All participants must be in clear view of the operator or in positive communication with each other.
3. All participants must be beyond the reach of machine elements which may move rapidly and present a hazard to them.
4. Where machine configuration or size requires that the operator leave his control station to install tools, and where machine elements exist which may move rapidly if activated, such elements must be separately locked out by positive means.

5. During repair procedures where mechanical components are being adjusted or replaced, the machine shall be de-energized or disconnected from its power source.

“Participant” is defined as any other person(s) engaged in the repair, adjustment, testing, or setting up operation in addition to the qualified operator or craftsman having control of the machine operating station.

### ***Locks, Hasps and Tags***

All Authorized individuals are assigned a sufficient quantity and type of locks and lockout devices necessary to allow control of all potential energy sources. Each Authorized individual will have individualized keys, preventing one employee from removing another's lock. In some cases, more than one lock, hasp and tag are needed to completely de-energize equipment and machinery. Additional locks may be acquired from the Program Administrator on a shift-by-shift basis. All locks and hasps shall be uniquely identifiable to a specific employee.

Signs, tags, padlocks, and seals shall have means by which they can be readily secured to the controls. Tagout device attachments shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds.

### ***SOP: General Lock and Tag Out Procedures***

Before cleaning, repairing, servicing, setting-up, adjusting, and unjamming prime movers, the following procedures will be utilized to place the machinery and equipment in a neutral or zero mechanical state.

#### **Preparation for Shutdown.**

Before Authorized employees turn off a machine or piece of equipment, the Authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control the energy. Additionally, he / she will notify all Affected employees that the machinery, equipment and / or process will be out of service

All affected employees will be directly notified of the impending shutdown

#### **Machine or Equipment Shutdown.**

The machine or equipment will be turned off or shut down using the specific procedures for that specific machine. An orderly shutdown will be utilized to avoid any additional or increased hazards to employees as a result of equipment de-energization.

If the machinery, equipment, or process is in operation, follow normal stopping procedures (depress stop button, open toggle switch, etc.). Move switch or panel arms to "Off" or "Open" positions and close all valves or other energy isolating devices so that the energy source(s) is disconnected or isolated from the machinery or equipment.

### **Machine or Equipment Isolation.**

All energy control devices that are needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

### **Lockout or Tagout Device Application.**

Lockout or tagout devices will be affixed to energy-isolating devices by authorized employees. Lockout devices will be affixed in a manner that will hold the energy isolating devices in the "safe" or "off" position.

### **Full Employee Protection**

When a tagout device is used on an energy-isolating device which is capable of being locked out, the tagout device shall be attached at the same location that the lockout device would have been attached, and the employer shall demonstrate that the tagout program will provide a level of safety equivalent to that obtained by using a lockout program.

In demonstrating that a level of safety is achieved in the tagout program which is equivalent to the level of safety obtained by using a lockout program, CVUSD will demonstrate full compliance with all tagout-related provisions of this program together with such additional elements as are necessary to provide the equivalent safety available from the use of a lockout device. Additional means to be considered as part of the demonstration of full employee protection will include the implementation of additional safety measures such as the removal of an isolating circuit element, blocking of a controlling switch, opening of an extra disconnecting device, or the removal of a valve handle to reduce the likelihood of inadvertent energization.

Lock and tag out all energy devices by use of hasps, chains and valve covers with an assigned individual locks.

### **Stored Energy**

Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete.

Release stored energy (capacitors, springs, elevated members, rotating fly wheels, and hydraulic/air/gas/steam systems) must be relieved or restrained by grounding, repositioning, blocking and/or bleeding the system.

### **Verification of Isolation**

Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employees will verify that isolation or de-energization of the machine or equipment have been accomplished.

After assuring that no Employee will be placed in danger, test all lock and tagouts by following the normal start up procedures (depress start button, etc.).

**Caution:** After test, place controls in neutral or OFF position.

### **Temporary Device Removal for Testing or Positioning**

In situations where lockout tagout devices must be temporarily removed for testing or positioning, the following sequence of actions will be followed:

1. Clear the equipment/machine of tools and materials
2. Remove employees from the equipment/machine area
3. Remove the lockout tagout devices,
4. Energize and proceed with testing or positioning,
5. De-energize all systems and reapply energy control measures.

### **Shift Change and / or Extended Lockout - Tagout**

Should a shift change occur before the machinery or equipment can be restored to service, the lock and tag out must remain. If the task is reassigned to the next shift, those Authorized employees must lock and tag out before the previous shift may remove their lock and tag.

### ***SOP: Release from LOCKOUT/TAGOUT***

Before lockout or tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

1. The work area will be thoroughly inspected to ensure that nonessential items have been removed and that machine or equipment components are operational.
2. The work area will be checked to ensure that all employees have been notified, safely positioned or removed. Before the lockout or tagout devices are removed, the affected employees will be notified that the lockout or tagout devices are being removed.
3. Each lockout or tagout device will be removed from each energy-isolating device by the employee who applied the device.
4. All Affected employees will be immediately notified that, before the equipment / machine has been started, all lockout and tagout devices have been removed from the equipment / machines.

### ***SOP: LOTO Procedure for Electrical Plug in-Type Equipment***

This procedure covers all electrical plug-type equipment such as office equipment, powered hand tools, powered bench tools, fans, etc.

When working on, repairing, or adjusting the above equipment, the following procedures must be utilized to prevent incidental or sudden start up:

1. Unplug Electrical Equipment from wall socket or in-line socket.
2. Attach "Do Not Operate" Tag and Plug Box & Lock on end of power cord. An exception is allowed in the regulation to not lock & tag the plug if the cord & plug remain in the exclusive control of the Employee working on, adjusting, or inspecting the equipment.
3. Test Equipment to assure power source has been removed by depressing the "Start" or "On" Switch.
4. Perform required operations.
5. Replace all guards removed.

6. Remove Lock & Plug Box and Tag.
7. Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

**NOTE:** Occasionally used equipment should be unplugged from power source when not in use.

## ***SOP: LOTO Procedures Involving More Than One Employee***

### Group Lockout or Tagout

When servicing and/or maintenance is performed by a crew, craft, department or other group, they will utilize a procedure which affords the employees a level of protection equivalent to that provided by the utilization of a personal lockout or tagout device.

Group lockout or tagout devices shall be used in accordance with the District's established ECP(s) and also in accordance with requirements that include, but are not necessarily limited to, the following:

1. Primary responsibility shall be vested in an Authorized employee for a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock);
2. Provision shall be made for the Authorized employee to ascertain the exposure status of individual group members with regard to the lockout or tagout of the machine or equipment;
3. When more than one crew, craft, department, etc. is involved, assignment of overall job-associated lockout or tagout control responsibility shall be given to an authorized employee designated to coordinate affected work forces and ensure continuity of protection; and
4. Each Authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

## ***SOP: Management's Removal of Lock and Tag Out***

Only the employee that locks and tags out machinery, equipment or processes may remove his/her lock and tag. However, should the employee leave the facility before removing his/her lock and tag, the Program Administrator may remove the lock and tag under specific conditions. The Program Administrator must be assured that all tools have been removed, all guards have been replaced and all employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process are returned to service. Notification of the employee who placed the lock is required prior to lock removal.

## ***Periodic Inspection***

CVUSD will conduct a periodic inspection of the energy control procedure(s), at least annually, to evaluate their continued effectiveness and determine necessity for updating the written procedure(s).

1. The periodic inspection will be performed by an Authorized employee or person other than the one(s) utilizing the hazardous energy control procedures being inspected.
2. Where lockout and/or tagout is used for hazardous energy control, the periodic inspection will include a review between the inspector and Authorized employees of their responsibilities under the hazardous energy control procedure being inspected.



3. The District will certify that the periodic inspections have been performed. The certification will identify the machine or equipment on which the hazardous energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

### ***Contractors***

CVUSD and Contractors will inform each other of their respective lockout tagout procedures.

CVUSD will ensure its employees understand and comply with the restrictions and prohibitions of the outside employer's energy control program

Contractors working on CVUSD property and / or equipment will be provided CVUSD's energy control procedures while servicing or maintaining equipment, machinery, or processes.

**ATTACHMENT A**

**The following are our recognized job descriptions that are covered by the OSHA Lockout Tagout Standard, CCR Title 8 Section 3314**

**Authorized & Affected Personnel**

<b>Dept / Job Description</b>	<b>Summary of task</b>
Transportation/Automotive Service Person	<p align="center"><b><u>Authorized Personnel</u></b></p> <ul style="list-style-type: none"> <li>• An employee who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment.</li> </ul> <p align="center"><b><u>Affected Personnel</u></b></p> <ul style="list-style-type: none"> <li>• An employee that will or may be in areas where Authorized employees are performing Lockout Tag out Activities</li> </ul>
MOC/Carpet-Flooring Custodian I, II, III	"
Applicable School Campus Site/Custodian I, II	"
Applicable School Campus Site/Custodian Specialist	"
Business Services-Innovation & Creative Services/District Postal Specialist	"
Business Services-Innovation & Creative Services/ Duplicating Dept. Clerk	"
Business Services-Innovation & Creative Services/ Duplication Operator	"
MOC/Electronics Technician I, II	"
Business Services-Innovation & Creative Services/Four Color Specialist	"
MOC/Grounds Equipment Operator I, II	"
MOC/Grounds Worker I, II, III	"
MOC/Grounds Equipment Operator II, III	"
Business Services-Innovation & Creative Services/Lead Duplicating Technician	"
MOC/Lead Electronics Technician	"
Facilities, Planning & Operations/Lead Storekeeper Warehouse Delivery Person	"

<p>MOC/Maintenance I Carpenter, Electrician, Fire Systems Power-Tool Repair, General Maintenance, HVACR, Painter, Plumber, Sheet Metal, Small Engine Repair &amp; Welder</p>	<p style="text-align: center;"><b><u>Authorized Personnel</u></b></p> <ul style="list-style-type: none"> <li>• An employee who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment.</li> </ul> <p style="text-align: center;"><b><u>Affected Personnel</u></b></p> <p>An employee that will or may be in areas where Authorized employees are performing Lockout Tag out Activities</p>
<p>MOC/Maintenance II Carpenter, Electrician, Equipment Repair, Fire System-Power Tool Repair, General Maintenance, HVACR, Locksmith, Painter, Plumber, Sheet Metal &amp; Welder</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance III Carpenter, Craft Specialist, Electrician, Equipment Repair, Fire Sprinkler Technician, HVACR, Locksmith, Painter, Plumber, Metal Sheet Worker-Welder &amp; Small Engine Repair</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance Lead worker- Carpenter, Electrician, HVACR, Painter &amp; Plumber</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance Material-Equipment Facilitator</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance Pool Technician</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance Scheduler-Parts Facilitator</p>	<p style="text-align: center;">“</p>
<p>MOC/Maintenance Sprinkler Technician I, II &amp; III</p>	<p style="text-align: center;">“</p>
<p>MOC/Mechanic I, II &amp; III</p>	<p style="text-align: center;">“</p>
<p>Business Services-Innovation &amp; Creative Services/Offset Press Operator</p>	<p style="text-align: center;">“</p>
<p>Business Services-Innovation &amp; Creative Services/Offset Press Operator Spec.</p>	<p style="text-align: center;">“</p>
<p>MOC/Pesticide Applicator Grounds Equipment Operator II</p>	<p style="text-align: center;">“</p>
<p>Business Services-Innovation &amp; Creative Services/Printer/Publisher Operator</p>	<p style="text-align: center;">“</p>
<p>MOC/Tool Crib Attendant.</p>	<p style="text-align: center;">“</p>
<p>Transportation/Transportation Technician</p>	<p style="text-align: center;">“</p>
<p>Facilities, Planning &amp; Operations/Warehouse Delivery Worker</p>	<p style="text-align: center;">“</p>

**ATTACHMENT B - Sample Energy Control Procedure**

<b>Lockout Tagout Energy Control Procedure</b>				
Company: <input style="width: 150px;" type="text"/>		Procedure Creation Date: <input style="width: 150px;" type="text"/>		
		Procedure Audit Date: <input style="width: 150px;" type="text"/>		
<b>Equipment Description:</b>	<input style="width: 100%;" type="text"/>			
<b>Equipment Location:</b>	<input style="width: 100%;" type="text"/>			
<b>Work Activity:</b>	<input style="width: 100%;" type="text"/>			
<b>Each person exposed or potentially exposed to hazardous energy must apply their own personal lock and tag to each energy isolating device.</b>				
# of Locks and Tags needed for this procedure: <input style="width: 80px;" type="text"/>				
Device(s) needed 1: <input style="width: 100px;" type="text"/> 2: <input style="width: 100px;" type="text"/> 3: <input style="width: 100px;" type="text"/>				
<ol style="list-style-type: none"> <li>1. Notify ALL affected employees that the machine will be shut down.</li> <li>2. Turn all machine operation controls to the "OFF" position.</li> <li>3. Proceed with the following steps.</li> </ol>				
ID #	Energy	Device	Location	Action to be taken
<ol style="list-style-type: none"> <li>4. Clear working area and machine / equipment of tools and other debris.</li> <li>5. Notify ALL affected employees that the machine will be re-energized.</li> <li>6. Remove locks, tags, and devices.</li> <li>7. Restore power to equipment.</li> </ol>				