Scaffold Depot

LOCKOUT / TAGOUT PROGRAM

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LOCKOUT / TAGOUT PROGRAM

Contractor/Subcontractor Responsibilities

All contractors/subcontractors shall be made aware of our Occupational Health and Safety Program rules and regulations. The Contractor Supervisors and/or Foreman shall be responsible for the direct supervision and safety of their crew. They are accountable to the Project Superintendent, Manager or Owner respectively as it relates to the workplace for the performance of personnel through the safe work practices and procedures as well as any other applicable Acts and Regulations. It is the contractor/subcontractor's responsibility to perform the job in compliance with our safety standards or other applicable legislation.

Any infractions not immediately corrected as directed by Scaffold Depot will result in the contractors/ subcontractors being advised of the breach of safety program policy and the action that will be taken as a result of the breach according to company policy. It must be firmly established that our safety program protects all workers on the job, including all subcontractor's employees.

PURPOSE

The purpose of this program is to ensure procedures are in place to prevent injuries from the unexpected energization, activation or release of hazardous energy during servicing or maintenance of machinery or equipment. This lockout/tagout program has been developed to establish procedures for de-energizing machines, equipment and processes to ensure work can be safely performed.

SCOPE

This program applies to all Scaffold Depot, staff, and contractors who perform servicing or maintenance on machines or equipment that may contain hazardous energy that, if released unexpectedly, could cause harm.

This program does not apply to the following:

1. Work on cord and plug connected electrical equipment where the unexpected energization or start-up is controlled by unplugging the equipment and the plug is under the direct control of the employee performing the work.

2. Minor servicing, tool changes or adjustments that do not have potential to cause injury.

REGULATION REFERENCES WorkSafeBC - Occupational Health and Safety Regulation Part 10 (10.0 – 10.12) De-energization and Lockout.

CAN/CSA-Z460-05 (R2010) - Control of Hazardous Energy - Lockout and Other Methods

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DEFINITIONS

Affected Employee: An employee who operates or uses a machine or equipment on which servicing or maintenance is being performed under lockout tagout or who works in an area where such work is being performed.

Authorized Employee: An employee authorized to implement lockout/tagout procedures on machines or equipment to perform maintenance or servicing work.

De-energized: Disconnected from all sources of energy and not containing residual or stored energy.

Electrical Disconnect Switch: A pull-type switch or circuit breaker which physically opens to disconnect the circuit.

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy, to or from a machine or equipment. This device usually de-energizes the machine or equipment and allows a padlock to be placed on it. A lockout device is used where a padlock cannot be placed directly on the energy isolating device. Energy isolating devices include: manually operated disconnect switches, circuit breakers; line valve; block.

Note: Push buttons, selection switches and other circuit - control type devices are not considered energy isolating devices.

Energy Source: Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational or other energy.

Hazardous Energy: Energy sources including electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational or other energy that, when released, can cause harm.

Isolation: Ensuring all sources of hazardous energy for a piece of equipment or machinery are moved or controlled to prevent it from unexpected activation or energization.

Lockout: The placement of a lock on an energy isolating device or lockout device to physically neutralize all energies in a piece of equipment or machinery ensure the energy isolating device being controlled cannot be operated until the lockout device is removed.

Lockout Device: A device that can be placed on an energy isolating device and that allows a positive means, such as a lock, to be placed on it to controlling the energy isolating device.

Servicing and/or Maintenance: Activities such as constructing, installing, setting up, adjusting, inspecting, modifying and/or servicing machines. This includes activities such as lubrication, cleaning or unjamming of machines or equipment and making adjustments.

Supervisor: A person who has charge over a workplace or authority over a worker. Depending on the particular reporting relationship, a Supervisor includes, but is not limited to any person responsible for overseeing workers under their direct supervision.

Tagout: The placement of a tagout device (warning tag) on an energy-isolating device to communicate the equipment must not be reenergized or operated until the tagout device is removed.

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RESPONSIBILITIES

Supervisors are responsible for:

- Identifying machines, equipment or processes in their area(s) that possess hazardous energy and are required to be included in the lockout/tagout program.
- Providing equipment, materials and protective devices necessary to perform work safely.
- Ensuring written lockout/tagout procedures are prepared for machines, equipment and processed in their area. A safety lockout procedure form is provided in ***Appendix 1***.
- Ensuring authorized employees under their control understand and apply lockout/tagout procedures.
- Ensure contractors performing servicing or maintenance work in their area comply with lockout/tagout procedures.

Employees are responsible for:

- Assisting in the development of lockout/tagout procedures for machines, equipment or processed in their area.
- Following procedures developed for machines, equipment or processes in their area.
- Reporting any deficiencies or problems associated with lockout/tagout procedures. Occupational Health and Safety Department is responsible for:
- Providing assistance and guidance to departments regarding lockout and tagout procedures.
- Coordinating appropriate training for employees.
- Reviewing and updating the lockout/tagout program.

Contractors are responsible for:

- Complying with the requirements of this program.
- Providing their own locks, tags and lockout devices.
- Removing their own locks, tags and lockout devices when the maintenance or servicing work has been completed.
- Contractors must communicate their lockout procedures to the designated Scaffold Depot representative.

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GENERAL LOCKOUT PROCEDURES

Lockout/Tagout Guidelines

1. Only authorized employees are permitted to perform lockout/tagout procedures.
2. If an energy isolating device is capable of being locked out, then it must be locked and tagged.
3. If an energy isolating device is not capable of being locked out, then it must be tagged out.
4. Prior to commencing servicing or work, equipment and machinery shall be inspected to verify the equipment or machinery can be effectively isolated.
5. All potential sources of hazardous energy (e.g. gravity, electrical, mechanical, pneumatic, pressure etc…) must be considered when determining lockout/tagout procedures.
6. Each person performing servicing or work on a machine must apply their own lock. After the lock has been applied, the key must be retained by the person who applied the lock.

Lockout/Tagout Equipment

Each department is responsible for selecting and maintaining their lockout/tagout equipment. Lockout/tagout equipment must meet the following requirements:

- Locks must be key operated and standardized for each department or trade.
- Locks must not be used for purposes other than lockout/tagout.
- Tags must be made of durable, non-conductive material and must include wording such as:

  DO NOT OPERATE… DO NOT START… DO NOT OPEN.

  Note: "OUT OF SERVICE" tags must not be used for lockout/tagout purposes.

Lockout/Tagout Procedure

Prepare for Shutdown

The authorized employee will:

1. Identify machines, equipment and processes to be isolated.
2. Inform all affected employees when machinery or piece of equipment will be locked out.
3. Identify the types and magnitude of hazardous energy to be controlled and understand the hazards of that energy.
4. Identify the methods for controlling the hazardous energy.
5. Identify all isolation points and energy isolation devices to be locked out and ensure remote computer and/or programmable computer logic controllers are considered.
6. Identify and obtain appropriate personal protective equipment.
7. Identify and obtain locks, tags, lockout devices and other equipment required to perform the work.

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Equipment Shutdown

1. Notify all affected employees of the lockout.
2. Shutdown the equipment following the normal stop or rundown procedures. (e.g. push ON/OFF or START/STOP buttons or switches).

Isolation

1. Locate all energy isolation devices required to control the hazardous energy.
2. Operate the energy isolation devices such that the machine or equipment is isolated from energy sources. This usually involves opening a disconnect switch, circuit breaker or closing valves.

   Note: Never open a disconnect switch without first shutting down the equipment as it could result in arcing or an explosion. Use the left hand rule when opening and closing disconnect switches. (Left hand rule: Stay to the right of the disconnect switch, face away and use your left hand to operate the switch. This positioning protects the face and body in the event of arcing or an explosion).

Apply Lockout/Tagout Devices

1. Apply locks and tags to each energy isolation device to ensure it is held in OFF position.
2. Where a lockout device is required for an energy isolation device, install the lockout device and apply locks and tags to ensure it is held in the “OFF” position.

De-energization: Stored Energy Release or Restraint

1. After application of lockout devices, all stored or residual energy must be relieved, disconnected, blocked, bled, restrained or otherwise made safe. **Note**: Remember to consider energy stored in capacitors, springs, pressure lines, elevated equipment.

Verification

1. Ensure all affected employees are cleared of the machine or equipment.
2. Before beginning any work, verify the machine or equipment is isolated and cannot be activated or restarted by one or more of the following actions:

   - Manually operating control buttons or switches to start or operate the machine or equipment. *Return controls to their off or neutral position*.
   - Using test instruments to test circuits.
   - Visually inspecting the position or movement of parts such as gears, rotating parts, shafts, flywheels to ensure movement has ceased; inspecting gauges or other indicators.

Release from Lockout

1. Ensure all non-essential equipment or parts have been removed from the machine and the machine is operationally intact and safe to be operated.
2. Ensure the machinery, equipment and surrounding area is clear of anyone who could be harmed by the start-up.
3. Ensure each person who applied a lockout device and tag removes these from each energy isolation device.
4. Energize the machine, but do not start it up.
5. Notify all affected employees the machine or equipment is ready to be started.
6. Re-start the machine or equipment.

SPECIAL LOCKOUT/TAGOUT PROCEDURES

Exception to Written Lockout/Tagout Procedures

Written procedures are not necessary for servicing or maintenance on machines or equipment with a single energy source that can be readily identified and isolated and where:

- There is no stored or residual hazardous energy after shut-down.
- The isolation and locking out of the energy source will completely deactivate and de-energize the machine or equipment.
- The machine or equipment is isolated and locked out.
- The lockout device is under the exclusive control of the authorized person performing the servicing or maintenance.

Testing on Energized Equipment

When there is a need to temporarily remove a lockout device to perform testing or troubleshooting on a piece of equipment or machinery, the following procedure is to be used:

1. Clear the machine or equipment of parts, tools that could be affected by energizing the machine or equipment.
2. Clear people from the area.
3. Remove the lock(s) and tag(s) from the affected energy isolation device.
4. Perform the testing.
5. De-energize and re-apply the lockout/tagout devices
6. Verify the machine or equipment has been re-isolated by operating controls etc…
7. Resume work on the machine or equipment.

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Group Lockout

When maintenance or servicing work is being performed by more than one authorized employee, a primary authorized employee must be assigned responsibility for the controlling all energy isolating devices for the machine, equipment or process.

1. Before beginning work, the primary authorized employee will apply a multi-lock hasp and lock to each energy isolating device and verify the machine, equipment or process has been isolated.
2. Other authorized workers review the adequacy of the isolation and apply their own locks to the multi-lock hasp.
3. Authorized employees perform work.
4. Upon completion of work, each authorized employee removes non-essential items from the work area and remove their own personal lock(s).
5. The primary authorized employee is the last one to remove their lock and the energy isolating device. This can only be done after the primary authorized employee has assessed the area and is satisfied it is safe to so.

Contractors

Whenever outside contractors perform maintenance or servicing work that require lockout/tagout procedures, the designated Scaffold Depot representative and each contractor shall inform each other of their respective lockout/tagout procedures.

The Scaffold Depot representative must communicate
this to affected employees and ensure these respective procedures are mutually understood.

Lockout/Tagout Device Removal

Each authorized employee who applies a lock and tag is responsible for removing their own lock and tag.

In situations where it is not possible for the employee to remove his/her own lock, the lock can be removed by an individual authorized to do so and by the following steps:

1. The authorized individual will assess the situation to determine whether it is safe to remove the lock, preferably with someone knowledgeable of the machine, equipment or process and reason for the lockout and/or the maintenance or service work being performed.
2. After it has been determined to be safe to remove the lock, the authorized individual will complete a ***"Lockout Device Removal Report" (Appendix 2)*** before removing the lock.
3. The authorized individual removes the lock and ensures the person whose lock was removed is notified of the removal before they return to work.

Appendix 1

SAFETY LOCKOUT PROCEDURE FORM

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DATE:	Scaffold Depot	SUPERVISOR:
MACHINE:	 SAFETY LOCKOUT 	CONTRACTOR:

ALWAYS PERFORM A MACHINE STOP BEFORE LOCKING OUT DISCONNECTS

BEFORE SERVICING THIS MACHINE, NOTIFY AFFECTED PERSONNEL

* Energy Source	Lockout Location	Procedure for Locking Out And / Or Releasing Energies	Verification Procedure

IF SYSTEM CANNOT BE LOCKED OUT OR IF SYSTEM FAILS VERFICATION CONTACT YOUR SUPERVISOR

Appendix 2

LOCKOUT DEVICE REMOVAL REPORT

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LOCKOUT DEVICE REMOVAL REPORT

Department: _____

Shift: _____

Authorized employee: _____

Machine, equipment, or process: _____

Time and date lockout device and information tag was discovered to have been left on:

_____

Confirmed that the authorized employee has left the site and/or facility? Yes ☐ No ☐

Supervisor's Initials: _____ Time and Date: _____

Attempts made to contact the authorized employee? Yes ☐ No ☐

Authorized employee has been contacted and is returning to the workplace to remove the lockout device and tag. Yes ☐ No ☐

If **"Yes"**, wait for authorized employee to return and remove the lock and tag.
File form for future reference.

If **"No"**, Supervisory personnel may authorize removal of the lock and tag once:

- The status and condition of the machine, equipment, or process are assessed and verified to be in a state that will allow for the safe removal of the lockout device.
- Provisions are in place to prevent the authorized employee from resuming work at this facility without notification of the fact that his or her lock and tag has been removed.

Supervisor's Initials: _____ Time and Date: _____

Supervisory personnel can now remove the lockout device and tag.

Supervisor's Initials: _____ Time and Date: _____

Witness: _____