

LOCKOUT TAGOUT: Model Lockout & Hazardous Energy Control Policy (Alberta Version)



INTRODUCTION

OHS laws require employers to implement lockout and de-energization measures to ensure that machinery and equipment is completely and safely de-energized while workers are repairing, maintaining and servicing it so that it doesn't accidentally start up and kill, maim and injure workers doing the service work. Here's a Model Policy/Program establishing general rules and safeguards for carrying out lockout operations. In addition to this general policy, you'll also need specific procedures setting out the technical lockout methods used for particular types of machinery and maintenance operations.

Lockout & Hazardous Energy Control Policy

This Model Policy is based on Alberta rules but can be adapted to meet the lockout tagout requirements set out in the OHS regulations of any jurisdiction.

1. PURPOSE

ABC Company has adopted this Policy to prevent amputation, crushing, electrocution, and other injuries to personnel performing maintenance work on machinery and equipment in accordance with the Alberta *Occupational Health & Safety Act*

(‘Act’), the *Occupational Health and Safety Code* (‘OHS Code’), the ABC Company Occupational Health and Safety Program (‘OHS Program’), and other applicable requirements and standards.

2. DEFINITIONS

For purposes of this Policy:

- **‘Equipment’** means machinery, equipment, and/or powered mobile equipment;
- **‘Energy-isolating device’** means a device that prevents the transmission or release of an energy source to equipment;
- **‘Harmful Substance’** means a substance whose properties, use, or present creates or may create a chemical or biological hazard or other health and safety danger to workers exposed to it;
- **‘Hazardous Energy’** means electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, thermal, gravitational, or any other form of energy that could cause injury due to the unintended motion, energizing, start’up or release of such stored or residual energy in machinery, equipment, piping, pipelines or process systems;
- **‘Isolated’** means to have separated, disconnected, de’energized or depressurized;
- **‘Lockout’** means the disconnection, blocking, or bleeding of all sources energy that may create a motion or action by any part of equipment and its auxiliary equipment;
- **‘Reasonably Practicable’** is a standard used to determine whether a specific safety measure is appropriate and viable for use by ABC Company to control a specific hazard at its workplace applied management on a case-by-case basis and which involves determination of:
 - **‘Reasonableness,’** an evaluation that weighs factors such as degree of risk to workers, nature of the hazard, length and frequency of exposure, number of workers exposed, and severity of

- consequences the hazard can result in; and
- **'Practicability,'** an evaluation of whether a particular method of controlling the hazard is technologically feasible, affordable, cost-effective for the particular hazard, suited to the circumstances of the workplace, or otherwise viable.
- To be deemed not 'reasonably practicable,' a measure must be more than simply inconvenient or costly but impossible to adopt or which could be adopted but only by investing time, energy, money, and other resources that are disproportionate to the safety benefits the measure would provide.
- **'Secure'** means ensuring that an energy isolating device cannot be released or activated; and
- **'Servicing'** means servicing, maintenance, repair, testing, adjustment, and/or inspection of equipment.

3. POLICY STATEMENT

ABC Company recognizes that workers servicing equipment may be injured as a result of unintentional movement, unexpected energization, or start-up of the equipment, or release of stored energy. ABC Company has conducted a hazard assessment to identify and evaluate these hazards and implement controls necessary to manage them, including adopting Lockout Procedures ('Lockout Procedures') setting forth detailed procedures and requirements for performing specific servicing operations on particular equipment.

4. SCOPE

4.1. Workers Covered by This Policy

ABC Company is committed to protecting the health and safety of **all workers** at its site regardless of who pays or employs them. Accordingly, this Policy is intended to protect:

- Full- or part-time workers employed by ABC Company;

- Temporary employees placed by an outside agency to work at the site;
- Contract labourers engaged to perform work at the site;
- Volunteers who work at the site for free; and
- Workers employed by prime contractors, contractors, and subcontractors to perform work at the site under a contract with ABC Company.

4.2. What This Policy Does Cover

This Policy establishes **general safety** lockout and de-energization requirements for servicing machinery and equipment

4.3. What This Policy Does Not Cover

The actual technical methods of lockout and de-energization required for particular operations are **not** set out in this Policy but rather in the Lockout Procedure(s) that applies to the specific maintenance operations to be conducted and the particular equipment being maintained. Such Lockout Procedures will be made available to and must be followed by all personnel who are involved in the servicing of equipment covered by those Lockout Procedures.

5. WHEN LOCKOUT IS REQUIRED

Equipment with an energy source must be fully and properly de-energized and the source of energization must be isolated before and during servicing operations to prevent hazardous energization in accordance with the steps set out in the Lockout Procedures that apply to the particular servicing operation to be conducted; and such equipment may not be used again unless and until it's properly restored to service in accordance with the applicable Lockout Procedures after servicing ends.

6. WHEN LOCKOUT IS NOT REQUIRED

ABC Company will create and implement an appropriate

alternative procedure for the safe performance of troubleshooting, making of minor adjustments, and other servicing operations of particular equipment without a lockout while the equipment is still operating where:

- The equipment manufacturer's specifications require the equipment to remain operative during servicing; or
- There are no manufacturer's specifications and it is not reasonably practicable to render the equipment inoperative.

7. LOCKOUT PROCEDURES

7.1. General Lockout Procedure

Lockout and control of hazardous energy must be effected by performing the following steps:

7.2. Isolation

Equipment may not be serviced until the equipment comes to a complete stop AND:

- All hazardous energy at the location where the servicing is to be carried out is isolated by activating an energy-isolating device;
- The energy-isolating device is effectively locked in accordance with the requirements set out below; and
- The equipment is otherwise rendered inoperable to prevent it from accidentally activating during servicing.

Rendering inoperative may involve removing vital parts, putting blocking in place, or alternative methods that provide workers protection that is equal to or greater than protection provided by isolating and securing. All energy-isolating devices that control an energy source that will be involved in the isolation must be located and physically secured in the isolating position before servicing is carried out.

7.3. Verification of Isolation

No worker may perform servicing work on equipment unless and until a competent worker with authority to implement the Lockout Procedure verifies that:

- The above isolation measures are fully completed;
- The equipment to be serviced is tested to verify that it is inoperative; and
- The worker is satisfied that the equipment actually is inoperative.

7.4. Securing of Isolation

Once all energy-isolating devices are activated to control hazardous energy, one of the following three methods will be used to secure energy-isolating devices:

Method 1: Securing By Individual Worker

Each worker involved in the servicing operation at each location in which the operation requiring lockout and isolation of hazardous energy is to be carried out must attach his/her own keyed padlock or other personal lockable securing device to the energy-isolating device. After each energy-isolating device is secured, the worker must verify that the hazardous energy source is effectively isolated.

Where more than one worker is working at each location requiring lockout and control of hazardous energy:

- Each worker must attach a personal lock to each energy-isolating device; AND
- The first worker applying a lock must verify that the hazardous energy source has been effectively isolated.

If a worker who places a personal lock is reassigned before the servicing work is finished or if the servicing work extends to another shift, ABC Company will ensure that:

- Another worker authorized by ABC Company to do so must attach a personal lock to the energy-isolating device before the lock placed by the worker who's leaving or being reassigned can be removed; OR
- Another method must be used to ensure the effective and orderly transfer of the lock of the worker who's leaving or being reassigned.

Personal locks must be traceable back to the individual workers who place them via markings on the lock or use of ID tags identifying the worker to whom the lock is assigned. The name of the worker to whom a personal lock or ID tag is assigned must be readily available at all times while the hazardous energy source is isolated.

When the servicing work requiring lockout and isolation of hazardous energy is complete, the equipment must be returned to operation in accordance with the rules and procedures set forth in Section 7.6. below.

Method 2: Securing By a Group of Workers

When multiple workers are involved and/or multiple energy-securing devices must be secured, energy-isolating devices may be secured using a group Lockout Procedure in accordance with the following requirements.

The Procedure provides that once all required energy-isolating devices are activated, a worker designated by ABC Company must:

- Secure all energy-isolating devices;
- Secure any keys for such energy-isolating devices via use of a lock box or other key securing device;
- Complete, sign, and post a checklist identifying the equipment covered by the Lockout and hazardous energy control procedure; and
- Verify and document that all sources of hazardous energy are effectively isolated.

Before servicing work begins, each worker working at each location requiring lockout and control of hazardous energy must apply his/her own lock key to the lock box or key-securing device to ensure that the master key(s) cannot be removed from the key-securing device unless and until each worker removes his/her personal lock.

Continuity of lockout and hazardous energy control must be maintained where a worker that places a personal lock is reassigned before the servicing work ends and/or the work continues to the next shift.

Once servicing work requiring lockout and isolation of hazardous energy ends, each worker who places a personal lock must remove the lock from the lock box or other key securing device.

Once all personal locks are removed, the equipment must be returned to operation in accordance with the rules and procedures set forth in Section 7.6. below.

Method 3: Securing By Complex Group Control

Where use of the individual or group Lockout methods set out above are not reasonably practicable, energy-isolating devices may be secured under the terms of the complex group control process set out in the Lockout Procedures. Where a complex group control process is used:

- Safe work procedures set out in the Lockout Procedures to ensure continuous safe performance of the servicing work requiring lockout and isolation of hazardous energy must be followed;
- A work permit or master tag procedure that meets the requirements of Section 215.1(3)(b) of the OHS Code must be used;
- A worker designated by ABC Company must activate and secure all required energy-isolating devices to control hazardous energy; and

- Another worker designated by ABC Company must verify that all sources of hazardous energy are effectively isolated.

The ABC Company Safety Coordinator or another designated manager will be responsible for obtaining the approval of an Alberta Human Services Director of Inspection required by Section 215.1(1) of the OHS Code to use the complex group control process.

Once the servicing work ends, the equipment must be returned to operation in accordance with the rules and procedures set forth in Section 7.6. below.

7.5. Tagging

Workers who perform servicing operations requiring lockout and isolation of hazardous energy must sign, date, and attach the ABC Company Lockout Warning Tag to equipment rendered inoperative for servicing to indicate that the equipment to which the tag is attached may not be operated until the tag is removed.

Lockout warning tags may not be removed except by workers designated by ABC Company as having authority to carry out lockout operations.

7.6. Returning the System to Operation

Workers may not remove a personal lock unless they:

- Placed the lock themselves;
- Are designated by ABC Company to remove the lock in accordance with the requirements set out below; or
- Are carrying out a procedure for securing remotely controlled systems permitted under Section 215.2 of the OHS Code.

Exception: In an emergency or where the worker who installs the lock is not available, a worker designated by ABC Company

may remove the lock after carrying out procedures to verify that the removal will not endanger any worker.

Devices securing energy-isolating devices may not be removed unless and until:

- Each worker involved is accounted for;
- Any personal locks placed by workers are removed; AND
- A worker designated by ABC Company carries out procedures to verify that no worker is in danger.

8. PERMISSIBLE ENERGY-ISOLATING DEVICES

Energy-isolating devices that may be used include (but are not limited to) manually operated electrical circuit breakers, disconnect switches, line valves, and blocks or similar devices that block or isolate energy. Push buttons, selector switches, and other control circuit type devices are **not** acceptable energy-isolating devices.

9. SERVICING OF CORD-CONNECTED EQUIPMENT

When servicing work is performed on cord-connected electrical equipment, e.g., changing the blade on a circular saw, workers may isolate the equipment by securing the isolating-device to the electrical plug or simply rendering the equipment inoperative via methods such as:

- Disconnecting the plug from the electrical supply;
- Keeping the plug in sight and within reach so nobody can plug it into a socket; and/or
- Keeping the plug under the worker's exclusive and immediate control at all times while servicing work is done.

If the worker leaves the cord-connected electrical equipment unattended before finishing the servicing work, he/she must verify that the plug is disconnected from the electrical supply before resuming the work.

10. PRIME CONTRACTORS, CONTRACTORS & SUBCONTRACTORS

ABC Company will ensure that all contractors and subcontractors that are hired to perform or affected by work projects at ABC Company work sites that are covered by this Policy and by ABC Company's Lockout Procedures are:

- Notified of the hazards the work involves;
- Notified of this Policy and the applicable Lockout Procedure(s) in place at the work site;
- Required to make their own workers aware of and ensure that those workers comply with this Policy and applicable Lockout Procedure(s).

ABC Company will ensure that prime contractors in charge of work at ABC Company work sites that involves or affects work operations covered by this Policy and ABC Company Lockout Procedures:

- Are notified of the hazards the work involves; and
- Receive a copy of this Policy and any Lockout Procedure(s) that apply to the work.

ABC Company will ensure that prime contractors protect the workers engaged in or affected by the work that involves exposure to the hazards this Policy addresses by either:

- Directly following this Policy and applicable Lockout Procedure(s); or
- Applying an equivalent procedure(s) that is:

- o Suitable for the workplace and equipment, and servicing performed;

- o Meets the requirements of this Policy and Part 15 of the OHS Code;

- o Is coordinated with the applicable Lockout Procedure(s); and

- o Provides equal or greater protection to workers as this

Policy and applicable Lockout Procedure(s) do.

11. TRAINING

Workers responsible for carrying out servicing operations requiring lockout and control of hazardous energy will receive training on how to properly conduct such procedures and follow the Lockout Procedure(s) applicable to the work.

12. EVALUATION

The workplace Joint Health and Safety Committee or Health and Safety Representative will review lockout logs as part of the routine monthly workplace inspection and report their findings. This Lockout Policy will also be reviewed at least once a year and more frequently where circumstances suggest that such review is needed.

Legislation/Regulations/Standards

The Occupational Health and Safety Act, RSA 2000, c 0-2

The Occupational Health and Safety Regulation, Alta Reg 62/2003

The Occupational Health and Safety Code 2009