# Lockout Tagout - Know The Laws of Your Province



Lockout Tagout (LOTO) regulations are essential safety protocols designed to protect workers from hazardous energy during the maintenance or servicing of machinery and equipment. These regulations require employers to implement procedures that isolate and control energy sources, such as electricity, hydraulics, or pneumatics, before work begins. LOTO regulations ensure that machinery cannot be accidentally started or energized, reducing the risk of workplace injuries and fatalities. Across Canada, specific LOTO requirements vary by jurisdiction, reflecting the unique legislative frameworks of each province and territory.

# **FEDERAL**

Under the <u>Marine Terminals</u> - Part 1917 Sections 1917.48(a)(1) to 1917.48(j)(3) and <u>Safety and Health Regulations for Construction</u> - Part 1926 Sections 1926.555(a) to 1926.555(a)(8), employers are required to implement safety measures for conveyor systems to protect workers from hazards.

**Danger zones** at or adjacent to conveyors **shall** be guarded to protect **employees**. **1917.48(a)(1)**.

An **elevated walkway** with guardrail or equivalent means of protection **shall** be provided where **employees** cross over moving conveyors, and suitable guarding **shall** be provided when

employees pass under moving conveyors. 1917.48(a)(2).

**Moving parts**. Conveyor rollers and wheels **shall** be secured in position. **1917.48(b)**.

**Positioning**. Gravity conveyor sections **shall** be firmly placed and secured to prevent them from falling. **1917.48(c)**.

#### Braking. 1917.48(d)

When necessary for safe operation, provisions **shall** be made for braking objects at the delivery end of the conveyor. 1917.48(d)(1).

Conveyors using electrically released brakes **shall** be constructed so that the brakes cannot be released until power is applied, and so that the brakes are automatically engaged if the power fails or the operating control is returned to the "stop" position. **1917.48(d)(2)**.

**Stability**. Portable conveyors **shall** be stable within their operating ranges. When used at variable fixed levels, the unit **shall** be secured at the operating level. **1917.48(e)**.

Emergency stop devices. Readily accessible stop controls shall be provided for use in an emergency. Whenever the operation of any power conveyor requires personnel to work in the immediate vicinity of the conveyor, the Conveyor or controls shall not be left unattended while the conveyor is in operation. 1917.48(f).

**Starting powered conveyors**. Powered conveyors **shall** not be started until all **employees** are clear of the conveyor or have been warned that the conveyor is about to start. **1917.48(g)**.

**Loading and unloading**. The area around conveyor loading and unloading points **shall** be kept clear of obstructions during conveyor operations. **1917.48(h)**.

# Lockout/Tagout. 1917.48(i)

Conveyors **shall** be stopped and their power sources locked out and tagged out during maintenance, repair, and servicing, unless power is necessary for testing. **1917.48(i)(1)**.

The starting device **shall** be locked out and tagged out in the stop position before an attempt is made to remove the cause of a jam or overload of the conveying medium, unless it is necessary to have the power on to remove the jam. **1917.48(i)(2).** 

## Safe practices. 1917.48(j)

Only designated persons **shall** operate, repair or service powered conveyors. **1917.48(j)(1)**.

The **employer shall** direct **employees** to stay off operating conveyors. **1917.48(j)(2)**.

Conveyors **shall** be operated only with all overload devices, guards and safety devices in place and operable. **1917.48(j)(3).** 

#### For more information:

General Requirements. Sections 1926.555(a)(1) to (8).

Further details on the Marine Terminals and Safety and Health Regulations for Construction can be found at <a href="mailto:osha.gov">osha.gov</a> and <a href="mailto:gov/laws">gov/laws</a>.

# **ALBERTA**

In Alberta, **employers** are legally obligated to implement and enforce Lockout and Tagout (LOTO) procedures to protect workers from hazardous energy during maintenance and servicing of machinery and equipment. These responsibilities are outlined in the *Alberta Occupational Health and Safety (OHS)* Code — Part 15 Sections 214(1) to 214(7) and 215.3(1) to 215.3(4).

## Securing Isolation by Individual Workers

If an **employer** chooses this option for securing an energy-isolating device, each worker involved must attach his or her own personal lockable securing device, typically a keyed padlock, to the energy-isolating device. **Section 214(1).** 

A worker who has placed a lock is also responsible for verifying that the energy source has been effectively isolated. **Section 214(2).** 

In the case where more than one worker is working at the same isolation point, each worker must attach his or her own personal lockable securing device, typically a keyed padlock, to the energy-isolating device. The first worker to do so must then verify, on behalf of all workers, that the energy source has been effectively isolated. **Section 214(3)**.

When using personal locks and in the case where the worker is reassigned before the work is completed, or the work is extended from one shift to another, continuity of hazardous energy control must be maintained. This can be accomplished by:

- (a) another worker, authorized by the **employer** (typically a supervisor or crew leader), placing his or her lock prior to the first worker removing his or her lock, or
- (b) ensuring that there is an effective transfer of control of the initial worker's lock to another worker who is typically designated by the **employer** for this purpose. **Section 214(4)**.

A personal lock must be traceable back to the worker who owns it and installs it. This is important when locks need to be removed and can serve as a check on the whereabouts of workers, particularly when many workers are involved and there are many pieces of equipment.

Locks can be made traceable in at least two ways:

- (a) they can bear a marking unique to each worker e.g. engraved name, identification code, colour code, symbol code, etc., or
- (b) incorporate an identification tag that identifies the worker to whom the lock is assigned. If this method is used, the tag must be secured to the lock in such a way that the tag cannot fall off. **Section 214(5)**.

It is not uncommon for personal locks to have engraved into them an identification code consisting of a combination of letters and numbers rather than the name of the worker to whom the lock is assigned. To provide traceability back to the lock owner, the **employer** must ensure that the worker's name is readily available throughout the period of time that the lock is used. If a lock or locks must be removed, the **employer** must be able to readily determine to whom the lock has been assigned. **Section 214(6)**.

Removing a lock usually means that work is completed and the machinery, equipment, or powered mobile equipment is ready to be returned to operation. A lock should not be removed until this is the case. In some situations, removing the lock may create a dangerous situation for workers.

When an energy-isolating device is secured with more than one personal lock, the final lock being removed is the most critical. The removal of this lock means that energy may no longer be isolated and that the unit is ready to be returned to service. Although each worker removing his or her lock can "ensure that no worker will be in danger if [the lock] is removed", it is only the worker removing the final lock that really needs to do this. A situation worth noting in which keeping the final lock in place may be particularly important is during a shift or personnel change.

Maintaining continuity of energy control may mean that the final lock is not removed until the shift or personnel change

is completed. If removal of the final lock may endanger workers during a shift or personnel change, then the final lock must not be removed until it is safe to do so. **Section 214(7)**.

## Returning equipment to operation

Except as described in subsection 215.3(2), only the worker who installed the lock, or is the designated worker under section 215(3) or section 215.1(3), is allowed to remove it. This is intended to prevent other persons from removing the lock and unknowingly creating a safety hazard. **Section 215.3(1)**.

Situations may arise in which the worker who installed the lock is unavailable e.g. off shift, on holidays, in transit, etc. or an emergency involving the equipment arises. In such situations, the lock may be removed by a competent worker designated by the employer to remove the lock. This ensures that the employer is aware of what is going to be done and that an appropriate worker performs the removal. Such removal must be done in accordance with a written procedure (as required by section 8 of the OHS Regulation) that includes verifying that no worker will be in danger due to removal of the lock. Section 215.3(2).

Before all securing devices are removed:

- (a) each worker involved in the work activity must be accounted for,
- (b) any personal locks placed by workers must be removed in accordance with subsection 215.3(1), and
- (c) the person about to return equipment to operation must first make sure that he or she, and other workers, are not in any danger. Audible and/or visual signals and warnings are often used to warn of equipment start-up. Personally contacting workers in the area who might be at risk of injury

may be necessary in some circumstances to let them know that the equipment is being returned to operation. **Section 215.3(3)**.

#### For more information:

Alberta Model Lockout and Hazardous Energy Control
 Policy. Sections 1 to 12.

Further details on the Occupational Health and Safety Code and Lockout & Hazardous Energy Control Policy can be found at alberta.ca and ohsinsider.com.

## **BRITISH COLUMBIA**

Under WorkSafeBC's <u>Occupational Health and Safety Regulation</u> — **Part 10 Sections 10.3 to 10.11, employers** must develop and enforce written lockout procedures, provide appropriate lockout devices, and ensure workers are trained in these procedures. **Employers** are also required to conduct regular inspections to verify compliance and effectiveness of the lockout program.

# Part 10 - De-energization and Lockout

# When lockout required

- (1) If machinery or equipment is shut down for maintenance, no work may be done until:
- (a) all parts and attachments have been secured against inadvertent movement,
- (b) where the work will expose workers to energy sources, the hazard has been effectively controlled, and
- (c) the energy isolating devices have been locked out as required by this Part.
- (2) If machinery or equipment is in use for normal production

work, subsection (1) applies if a work activity creates a risk of injury to workers from the movement of the machinery or equipment, or exposure to an energy source, and the machinery or equipment is not effectively safeguarded to protect the workers from the risk. **Section 10.3.** 

#### Lockout procedures

- (1) When lockout of energy isolating devices is required, the devices must be secured in the safe position using locks in accordance with procedures that are made available to all workers who are required to work on the machinery or equipment.
- (2) The **employer must** ensure that each worker required to lock out has ready access to sufficient personal locks to implement the required lockout procedure.
- (3) Combination locks must not be used for lockout.
- (4) Each personal lock must be marked or tagged to identify the person applying it.
- (5) Procedures must be implemented for shift or personnel changes, including the orderly transfer of control of locked out energy isolating devices between outgoing and incoming workers.
- (6) If the use of a personal lock is not practicable for lockout, another effective means, if approved by the Board, may be used in place of a personal lock to secure an energy isolating device in a safe position. **Section 10.4.**

# Access to energy isolating devices

When an energy isolating device is locked out, the lock must not prevent access to other energy isolating devices supplying machinery or equipment that could cause injury to workers. **Section 10.5.** 

## Checking locked out equipment

- (1) Effective means of verifying lockout **must** be provided and used.
- (2) Before commencing work, a worker **must** verify that all energy sources have been effectively locked out. **Section 10.6.**

## Worker responsibilities

Each worker who works on machinery or equipment requiring lockout is responsible for:

- (a) locking out the energy isolating devices before starting work, except as provided by section 10.9,
- (b) removing personal locks on the completion of the worker's work, and
- (c) maintaining immediate control of the key(s) to personal locks throughout the duration of the work. **Section 10.7.**

#### Removal of locks

- (1) A personal lock **must** only be removed by the worker who installed it, or if this is not possible, the matter must be referred to the supervisor or manager in charge, who will be responsible for its removal.
- (2) The supervisor or manager in charge must:
- (a) make every reasonable effort to contact the worker who installed the lock, and
- (b) ensure that the machinery or equipment can be operated safely before removing the lock.
- (3) A worker must be notified at the start of the worker's next shift if the worker's personal lock(s) have been removed since the worker's previous shift. Section 10.8.

#### For more information:

- Group lockout procedure. Section 10.9.
- Alternative procedures. Section 10.10.
- Locks not required. Section 10.11.

Further details on the Occupational Health and Safety Regulation can be found at <a href="mailto:gov.bc.ca">gov.bc.ca</a>.

## **MANITOBA**

The <u>Manitoba Workplace Safety and Health Act and Regulation</u> – Sections 16.14(1) to 16.14(4), 16.15(1) to 16.15(3), 16.16(1) to 16.16(3), and 16.7 mandates that employers establish a code of practice for controlling hazardous energy, supply necessary lockout devices, and train workers in their use.

## Locking out — Safety Precautions for Employers and Workers

Subject to subsections (3) and (4), when a machine is serviced, repaired, tested, cleaned, maintained, or adjusted, an **employer must** ensure that no worker performs work on the machine until it has come to a complete stop and the worker performing work on the machine has:

- (a) locked out the machine and removed and rendered safe any hazardous condition; or
- (b) otherwise rendered the machine inoperative in a manner that prevents reactivation and provides protection that is equal to, or greater than, the protection provided by clause (a). **Section 16.14(1).**

An **employer must** ensure that a worker does not perform work on a machine that is to be serviced, repaired, tested, cleaned, maintained or adjusted until:

(a) the machine is tested to ensure that it is inoperative; and (b) the worker is assured that it is inoperative. **Section 16.14(2)**.

An **employer must** develop and implement safe work procedures for the service, repair, testing, cleaning, maintenance, or adjustment of a machine when:

- (a) the manufacturer's specifications require the machine to remain operative when it is serviced, repaired, tested, cleaned, maintained, or adjusted; or
- (b) there are no manufacturer's specifications and it is not reasonably practicable to lockout the machinery when it is serviced, repaired, tested, cleaned, maintained, or adjusted. **Section 16.14(3).**

When it is not reasonably practicable to lockout the machinery when it is serviced, repaired, tested, cleaned, maintained, or adjusted, an **employer must** ensure that the safe work procedures developed in subsection (3) offer protection to a worker that is equal to or greater than the protection provided by a lockout procedure. **Section 16.14(4).** 

## Removing a lock

**No person** may remove a lock from locked out machinery unless the person is the worker who installed the lock. **Section 16.15(1).** 

Despite subsection (1), a **competent person** designated by the **employer** may remove the lock in an emergency or when the worker who installed the lock is not available. **Section** 16.15(2).

An **employer must** ensure that no worker returns a machine to operation after it has been locked out or rendered inoperable until the worker determines that no other person may be endangered by the operation of the machine. **Section 16.15(3)**.

# Lock and key process

- (1) When the lockout procedure uses a lock and key, an employer must:
- (a) issue to each worker who is required or permitted to work on a machine a lock that is operable only by that worker's key or a duplicate key;
- (b) designate a worker to keep the duplicate key;
- (c) ensure that the duplicate key is accessible only to the designated worker;
- (d) ensure that the lock used has a unique mark or identification tag on it that identifies the **worker** to whom the lock is assigned; and
- (e) ensure that a logbook is kept to record the use of the duplicate key. **Section 16.16(1).**
- (2) Where it is not reasonably practicable to use a worker's key to remove a lock, the **employer** may permit the designated worker to remove the lock if the designated worker has determined that:
- (a) the key used to lock the lock is not available; and
- (b) it is safe to remove the lock and activate the machine. **Section 16.16(2).**

When the lock has been removed, an **employer** must ensure that the **worker** who locked out the machine is informed of the removal of the lock. **Section 16.16(3).** 

#### For more information:

Control of more than one machine. Section 16.17.

Further details on the Manitoba Workplace Safety and Health Act and Regulation can be found at <a href="mailto:gov.mb.ca">gov.mb.ca</a>.

## **NEW BRUNSWICK**

According to New Brunswick's <u>Occupational Health and Safety</u>
<u>Act</u> — Sections 239(1) to 239(6) and 240, employers are required to develop written lockout procedures, provide suitable lockout devices, and ensure workers receive training. **Employers** must also verify that energy-isolating devices are locked out before any maintenance work begins.

## Lock Out Procedure for Employers and Employees

- (1) An employer shall ensure that in addition to the normal control start and stop mechanism, any equipment or machine has a means of isolating the energy source to the equipment or the machine that is:
- (a) lockable,
- (b) in a location familiar to all employees, and
- (c) properly identified. Section 239(1).

An **employer shall** provide a safety lock and key to an **employee** who may have to lock out any equipment or machine. **Section 239(2)**.

An **employer shall** establish a written lockout procedure for equipment and machines and ensure that an **employee** who may be required to lock out the equipment or the machine is adequately instructed and trained to lock out the equipment or the machine. **Section 239(3)**.

Subject to section 240, where any equipment or machine is to be cleaned, maintained, adjusted or repaired, an **employer shall** ensure that **no employee** works on the equipment or the machine until:

(a) a competent person puts the equipment or the machine in a zero energy state,

- (b) **each employee** who will be working on the equipment or the machine:
- (i) verifies that all potential energy sources have been made inoperative,
- (ii) locks out the equipment or the machine using the safety lock and key provided by the **employer**, and
- (iii) puts a non-conductive tag on the safety lock that contains:
- (A) words directing persons not to start or operate the equipment or machine,
- (B) the qualified person's printed name and signature, and
- (C) the date and time when the tag was put on the safety lock. **Section 239(4).**

No employee shall clean, maintain, adjust or repair any equipment or machine until the employee verifies that paragraphs 4(a) and (b) have been complied with and verifies by testing that the equipment or the machine is inoperative. Section 239(5).

No person shall remove a safety lock or tag except:

- (a) the person who installed it, or
- (b) in an emergency or where attempts made to contact the person referred to in paragraph (a) indicate the person is not available, a competent **employee designated by the employer**. **Section 239(6).**

# Code of practice where lock out procedure not appropriate

Where the lock out procedure referred to in section 239 is inappropriate for the cleaning, maintenance, adjustments or repairs to be performed or is inadequate for the protection of an **employee**, an **employer shall**:

(a) establish a code of practice in consultation with the committee or health and safety representative, if any, specifying personnel responsibilities, personnel training and details of procedure for the neutralization, clearance, release, and start up of the equipment or machine. **Section 240**.

Further details on the Occupational Health and Safety Act can be found at <a href="mailto:laws.gnb.ca">laws.gnb.ca</a>.

## **NEWFOUNDLAND & LABRADOR**

The Newfoundland's <u>Occupational Health and Safety Regulations</u> – Part III – Sections 17, Part IX Sections – 127 to 137, Part XXVI – Sections 477, 484 and 490 to 497 require employers to implement lockout procedures, supply appropriate devices, and train workers accordingly. Employers must also ensure that machinery is de-energized and locked out before maintenance or servicing.

## General requirement

Where the unexpected energization or startup of machinery or equipment or the unexpected release of an energy source could cause injury, the energy source **shall** be isolated and effectively controlled. **Section 128**.

# When lockout required

- (1) Where machinery or equipment is shut down for maintenance, no work may be done until:
- (a) all parts and attachments have been secured against inadvertent movement;
- (b) where the work would expose workers to energy sources, the hazard has been effectively controlled; and
- (c) the energy isolating devices have been locked out as

required by this Part.

(2) Where machinery or equipment is in use for normal production work, subsection (1) applies where a work activity creates a risk of injury to workers from the movement of the machinery or equipment, or exposure to an energy source, and the machinery or equipment is not effectively safeguarded to protect the workers from the risk. **Section 129.** 

## Lockout procedures - Employer Duties

- (1) Where lockout of energy isolating devices is required, the devices **shall** be secured in a safe position using locks in accordance with procedures that are made available to all workers who are required to work on the machinery or equipment.
- (2) An **employer shall** ensure that each worker required to lock out has ready access to sufficient personal locks to implement the required lockout procedure.
- (3) Combination locks **shall** not be used for lockout.
- (4) A personal lock **shall** be marked or tagged to identify the person applying it, the equipment being locked out and the date the lock was applied.
- (5) Procedures **shall** be implemented for shift or personnel changes, including the orderly transfer of control of locked-out energy isolating devices between outgoing and incoming workers.
- (6) Where the use of a personal lock is not practicable for lockout, other effective means approved by the minister may be used in place of a personal lock to secure an energy isolating device in the safe position.
- (7) Where an energy isolating device is locked out, the lock shall not prevent access to other energy isolating devices supplying machinery or equipment that could cause injury to

workers. Section 130(1) to (7).

## Checking locked out equipment

- (1) Effective means of verifying lockout **shall** be provided and used.
- (2) Before commencing work, a worker **shall** verify that all energy sources have been effectively locked out. **Section 131(1)**.

## Worker responsibilities

A worker who works on machinery or equipment requiring lockout is responsible for:

- (a) locking out the energy isolating devices before starting work except as provided by section 134;
- (b) removing personal locks on the completion of work; and
- (c) maintaining immediate control of the key to personal locks throughout the duration of the work. **Section 132.**

#### Removal of locks

(1) A personal lock **shall** only be removed by the worker who installed it, or where this is not possible, the matter **shall** be referred to the supervisor who **shall** be responsible for its removal.

# (2) A supervisor shall:

- (a) make every reasonable effort to contact the worker who installed the lock;
- (b) ensure that the machinery or equipment can be operated safely before removing the lock; and
- (c) ensure that locks that are not in active use are removed from machinery or equipment.

(3) A worker shall be notified at the start of the worker's next shift where the worker's personal lock has been removed since the worker's previous shift. **Section 133.** 

#### For more information:

- Part IX Re-Energization and Lockout Definitions. Section
   127.
- Group Lockout Procedure. Section 134(1).
- Alternative procedures. Section 135(1).
- Where locks not required. Section 136.
- Part XXVI Electrical Operations Definitions.
- Low voltage electrical equipment disconnection and lockout. Section 484, 490.
- Isolation and lockout. Section 490.
- Warning signs. Section 491.
- De-energized high voltage systems isolation and lockout. Section 492.
- Person in charge. Section 493.
- Switching sequences. Section 494.
- Grounding and blocking. Section 496.
- Multiple authorities. Section 497.

Further details on the Occupational Health and Safety Regulations can be found at <a href="mailto:assembly.nl.ca">assembly.nl.ca</a>.

# **NOVA SCOTIA**

The <u>Occupational Safety General Regulations</u> in Nova Scotia require <u>employers</u> to develop and implement lockout procedures, provide appropriate devices, and ensure worker training pursuant to <u>Part 6 – Sections 51, 52, 53, 54 Employers</u> must also verify that machinery is locked out before maintenance or servicing.

# **Employer Responsibilities**

- (3) An employer shall ensure that, in addition to any normal start and stop control mechanism, a machine, equipment, tool or electrical installation has a means of isolating all sources of energy to the machine, equipment, tool, or electrical installation that is:
- (a) accessible when needed by an employee; and
- (b) readily identifiable.
- (4) An employer shall ensure that where a person may be exposed to a hazard by the manual or automatic energizing of a machine, equipment, tool, or electrical installation, or any part of it, a de-energized machine, equipment, tool, or electrical installation, or any part of it, is energized:
- (a) only in accordance with an applicable written procedure established by the **employer**; and
- (b) only after all persons are clear of the hazardous area and have been instructed to remain clear. **Section 51(3)(4).**

## Lock-out procedure

Where work is performed on a machine, equipment, tool or electrical installation, and the work is hazardous to a person in the workplace if the machine, equipment, tool or electrical installation is or becomes energized, an **employer shall** ensure that:

- (a) the work is done in accordance with a written lock-out procedure established by the **employer**;
- (b) no person works on the machine, equipment, tool, or electrical installation until the machine, equipment, tool, or electrical installation:
- (i) is put in and maintained at a zero energy state,
- (ii) is locked out, and

- (iii) has a lock-out tag at each lock-out location; and
- (c) a competent person verifies that the requirements of clauses (a) and (b) have been complied with and tests to determine that the machine, equipment, tool, or electrical installation is in a zero energy state.
- (1A) No employee shall perform work on a machine, equipment, tool, or electrical installation in the circumstances described in subsection (1) unless the requirements of clause 52(1)(b) are met.
- (2) The written lock-out procedure referred to in subsection
- (1) **shall** include:
- (a) provision for complying with the requirements of subsection (1);
- (b) the method of notifying a person in the work area of safe conditions for work after a lock-out has been completed;
- (c) the method of determining that all persons near the locked-out machine, equipment, tool, or electrical installation are clear of the hazardous area and have been instructed to remain clear before the machine, equipment, tool, or electrical installation, or any part of it, is energized; and
- (d) the method of energizing the machine, equipment, tool, or electrical installation. **Section 52(1)**.
- (1) No person other than the person who installed it **shall** remove a lock-out device or a lock-out tag on a machine, equipment, tool or electrical installation.
- (2) Despite subsection (1), where reasonable attempts have been made to contact the person who locked out the machine, equipment, tool, or electrical installation and that person is not available:

- (a) in a serious emergency, a person who has determined that it is safe to energize the equipment may remove a lock-out device or a lock-out tag; or
- (b) a competent person who:
- (i) is designated in the written lock-out procedure, and
- (ii) has determined that it is safe to energize the equipment, may remove a lock-out device or a lock-out tag. **Section 53(1)**.

Despite subsection 51(4) or Section 52, where work is performed on a machine, equipment, tool, or electrical installation, and the work is hazardous to a person in the workplace if the machine, equipment, tool, or electrical installation is or becomes energized, and the requirements of subsection 51(4) or Section 52 are:

- (a) inappropriate for the work to be performed or inadequate for the protection of persons at the workplace; or
- (b) not reasonably practicable where the electrical installation is used for the generation or transmission of electricity, an **employer** may substitute for the requirements of those provisions an alternative adequate written procedure that specifies personnel responsibilities, training, and equipment requirements and the details for carrying out the work in a manner that will ensure the safety of all person who may be exposed to a hazard arising from the work. **Section 54.**

#### For more information:

- Section 51(1).
- Imposition of alternative written lock out provisions.
   Section 54.

Further details on the Occupational Safety General Regulations can be found at novascotia.ca.

## NORTHWEST TERRITORIES & NUNAVUT

In Northwest Territories and Nunavut, the <u>Occupational Health</u> and <u>Safety Regulations</u> — <u>Part 10 Sections 147(1) to (11)</u> obligate <u>employers</u> to establish lockout procedures, provide necessary devices, and train workers.

# Part 10 Machine Safety - Locking Out Responsibilities for Employers

- (1) Subject to section 148, an **employer shall**, before a worker undertakes the maintenance, testing, repair, or adjustment of a machine other than a power tool, ensure that the machine is locked out and remains locked out during that activity unless doing so puts a worker at risk.
- (2) An **employer shall**, before a worker undertakes the maintenance, testing, repair, or adjustment of a power tool, ensure that the energy source has been isolated from the power tool, any residual energy in the power tool has been dissipated and the energy source remains isolated during that activity.

# (3) An employer shall:

- (a) provide a written lockout process to each worker who is required or permitted to work on a machine to which subsection(1) applies; and
- (b) if the lockout process uses a lock and key, issue to that worker a lock that is operable only by that worker's key.
- (4) If the lockout process does not use a lock and key, an **employer shall** designate an individual to coordinate and control the lock out process.
- (5) If the lockout process uses a lock and key, an **employer shall** designate an individual to keep a duplicate key and ensure that:

- (a) the duplicate key is accessible only to the designated individual; and
- (b) a logbook is kept to record the use of the duplicate key and the reasons for that use.
- (6) If it is not reasonably possible to use a worker's key to remove a lock, an **employer** may permit the individual designated under subsection (5) to remove the lock using the duplicate key if the designated individual:
- (a) has determined the reason that the worker's key is not available;
- (b) has determined that it is safe to remove the lock and activate the machine; and
- (c) has informed the Committee members or a representative of the proposed use of the duplicate key before it is used.
- (7) An **employer shall** ensure that the designated individual who is permitted to use a duplicate key under subsection (6):
- (a) records in the logbook the removal of the lock including the reason for the use of the duplicate key and the date of its use; and
- (b) signs the logbook each time that the duplicate key is used.
- (8) If a central automated system controls more than one machine, an **employer shall** ensure that the machine to be maintained, tested, repaired or adjusted is isolated from the central system before the lockout process required by subsection (3) is implemented.
- (9) After a lockout process has been initiated, the worker who installed the device or initiated the process **shall** check the machine to ensure that the machine is inoperative.

- (10) An **individual shall** not deactivate a lockout process that does not use a lock and key unless it is the individual designated under subsection (4).
- (11) An **individual shall** not remove a device that is part of a lockout process unless the individual is:
- (a) the worker who installed the lockout device; or
- (b) an individual designated under subsection (5). **Section 147(1) to (11).**

Further details on the Occupational Health and Safety Regulations can be found at <a href="mailto:gov.nt.ca">gov.nt.ca</a>.

## **ONTARIO**

Under Ontario's <u>Reg. 851: Industrial Establishments</u> — Sections 42(1) to (7), 76 and <u>Occupational Health and Safety Act</u> — Section 25 (1),(2), employers must establish lockout procedures, provide suitable devices, and train workers.

# Lock and tag the power supply

Under subsection 42(1) of <u>Regulation 851-Industrial</u> <u>Establishments</u> the power supply must be disconnected, locked out and tagged on or near live exposed parts of the installations, equipment, or conductor:

- Before any work is done.
- While work is being done.

# Check to ensure lockout requirements are in place

Under subsection 42(2) of *Regulation 851*, workers must ensure the lockout requirements are in place **before** beginning work.

# Written procedures

Under subsection 42(7) of Regulation 851, employers must have

written procedures for disconnecting, locking out of service and tagging.

## Duties under the Occupational Health and Safety Act

- Under subsection 25(1)(c) of the <u>Occupational Health and</u> <u>Safety Act</u>, employers must ensure the measures and procedures prescribed are done.
- Under subsection 25(2)(a) of the *Occupational Health and Safety Act*, *employers must* provide information, instruction and supervision to a worker to protect the health and safety of the worker.

## Machine Guarding Responsibilities

- (1) The power supply to electrical installations, **equipment or conductors shall** be disconnected, locked out of service and tagged before any work is done, and while it is being done, on or near live exposed parts of the installations, equipment, or conductors.
- (2) Before beginning the work, each worker shall determine if the requirements of subsection (1) have been complied with.
- (3) Locking out is not required:
- (a) if the conductors are adequately grounded with a visible grounding mechanism; or
- (b) if the voltage is less than 300 volts and there is no locking device for the circuit breakers or fuses and procedures are in place adequate to ensure that the circuit is not inadvertently energized.
- (4) If locking out is not required for the reason set out in clause (3) (b), the **employer shall** ensure that the procedures required by that clause are carried out.
- (5) If more than one worker is involved in the work referred to in subsection (1), the worker who disconnected and locked

out the power supply **shall** communicate the purpose and status of the disconnecting and locking out.

- (6) If a tag is used as a means of communication, the tag:
- (a) **shall** be made of non-conducting material;
- (b) **shall** be secured to prevent its inadvertent removal;
- (c) **shall** be placed in a conspicuous location;
- (d) **shall** state the reason the switch is disconnected and locked out;
- (e) **shall** show the name of the worker who disconnected and locked out the switch; and
- (f) **shall** show the date on which the switch was disconnected and locked out.
- (7) The **employer shall** establish and implement written procedures for compliance with this section. **Section 42(1)**.

## **Duties of employers**

- (1) An employer shall ensure that:
- (c) the measures and procedures prescribed are carried out in the workplace;
- (2) Without limiting the strict duty imposed by subsection
- (1), an **employer shall**:
- (a) provide information, instruction and supervision to a worker to protect the health or safety of the worker; **Section 25.**

#### For more information:

• Maintenance and Repairs. Section 76.

Further details on the Reg. 851: Industrial Establishments and

Occupational Health and Safety Act can be found at <a href="https://ontario.ca/laws">ontario.ca/laws</a> and <a href="https://ontario.ca">ontario.ca</a>.

## PRINCE EDWARD ISLAND

The <u>Occupational Health and Safety Act General Regulations</u> – **Sections 30.6, 30.7, and 30.10** in PEI require **employers** to develop lockout procedures, provide necessary devices, and train workers. **Employers** must ensure that machinery is deenergized and locked out before maintenance or servicing.

#### Lock-out

- (1) The **employer shall** ensure that in addition to the normal control start and stop switch, all electrically driven machinery and equipment has installed in the power supply circuit a disconnecting means which is:
- (a) of a lockable type;
- (b) in a location familiar to all; and
- (c) properly identified.
- (2) The **employer shall** provide a safety lock and key for use on disconnecting means described in subsection (1) to all machinery and equipment operators and all maintenance personnel.

# **Training**

(3) The **employer shall** ensure that a worker has been adequately trained in lockout procedures for the particular situation.

#### Shut-down

(4) The **employer shall** ensure that machinery is not lubricated, cleaned, serviced or repaired while in motion unless a means is available which does not expose the worker

to risk of injury. Section 30.6.

## Servicing

- (1) Where machinery or equipment is shut down for cleaning, maintenance or repairs, the **employer shall** ensure that no worker carries out work on the machinery or equipment until that worker has:
- (a) locked out the source of energy using the safety lock and key that the **employer must** provide under section 30.6; and
- (b) put the machine in a zero energy state by ensuring that all:
- (i) power sources,
- (ii) pressurized fluids and air,
- (iii) potential mechanical energy,
- (iv) accumulators and air surge tanks,
- (v) kinetic energy of machine members,
- (vi) loose or freely movable machine members, and
- (vii) material or workpieces supported, retained or controlled by the machine which can move or cause movement, are:
- (A) locked out,
- (B) vented to the atmosphere,
- (C) reduced to atmospheric pressure, or
- (D) otherwise acted upon to render the machinery incapable of spontaneous or unexpected action;
- (c) put on the control device of the machinery a tag which does not conduct electricity and which contains:

- (i) words directing persons not to start or operate the machinery,
- (ii) the worker's printed name and signature, and
- (iii) the date when the tag was put on the machinery.
- (2) No worker **shall** carry out work on machinery or equipment shut down for cleaning, maintenance or repairs until he has complied with subsection (1) and has double checked to ensure that the machinery is inoperative. **Section 30.7.**

#### Removal of lock-out device

- (3) No person **shall** remove a lock-out device or tag except:
- (a) the worker who installed it; or
- (b) in an emergency or where attempts made to contact the worker indicate he is not available, a competent worker designated by the **employer**, who has first ensured that no person will be endangered by the removal.

#### For more information:

 Removing and rendering ineffective safeguards. Section 30.10.

Further details on the Occupational Health and Safety Act General Regulations can be found at <a href="mailto:princeedwardisland.ca">princeedwardisland.ca</a>.

# **QUÉBEC**

According to Québec's <u>Regulation Respecting Occupational</u> <u>Health and Safety</u> — Sections 195 to 198, 201, 205 and 206, **employers** are required to implement lockout procedures, supply appropriate devices, and ensure worker training.

#### **Definition**

"Lockout" means an energy control method designed to install

an individually keyed lock on an energy isolating device or on any other device allowing for the control of energy such as a lockout box. **Section 195.** 

Before undertaking any work in the danger zone of a machine, such as erecting, installing, adjusting, inspecting, unjamming, setting up, decommissioning, maintaining, dismantling, cleaning, servicing, refurbishing, repairing, altering or unlocking, lockout, or, failing that, any other method that ensures equivalent safety must be applied. **Section 196.** 

Where the **employer** having authority over the establishment intends to apply an energy control method other than lockout, the **employer must** first ensure the equivalent safety of that method by analyzing the following:

- (1) the machine features;
- (2) identification of the health and safety risks when using the machine;
- (3) the estimate of the frequency and seriousness of the potential employment injuries for each risk identified;
- (4) the description of prevention measures that apply for each risk identified, the estimate of the level of risk reduction thus obtained and the assessment of residual risks. **Section 198.**

Where lockout is the method applied, the steps required to control energy **must** include:

- (1) deactivation and complete shutdown of the machine;
- (2) elimination or, if that is impossible, control of any residual or stored energy source;
- (3) lockout of the machine's energy source cutoff points;

- (4) verification of lockout by using one or more techniques making it possible to reach the highest level of efficiency;
- (5) safely unlocking and reoperating the machine. Section 201.

The **employer** who has authority over the establishment must provide lockout material including individually keyed locks, except if an **employer** or self-employed worker is responsible.

The name of the person who installs an individually keyed lock must be clearly indicated on the individually keyed lock. Despite the foregoing, the **employer** may provide persons having access to the danger zone of a machine with individually keyed locks with no name indication, if the **employer** keeps a record thereof.

## The record contains at least the following information:

- (1) identification of each individually keyed lock;
- (2) the name and telephone number of each person to whom a lock is given;
- (3) where applicable, the name and telephone number of the **employer** of each worker to whom a lock is given;
- (4) the date and time at which the lock is given;
- (5) the date and time at which the lock is returned. **Section 205.**

Where a lock is forgotten or a key is lost, the **employer** who has authority over the establishment may, with the agreement of the person who carried out lockout, authorize the lock to be removed after ensuring that it does not involve any danger for the health, safety and physical well-being of that person.

Where the agreement of the person who carried out lockout is not obtained, the **employer** who has authority over the establishment must, before authorizing the lock to be removed, inspect the danger zone of the machine accompanied by a representative of the certified association of which the person is a member, if he or she is available on the work site or, failing that, by a worker present on the worksite designated by the **employer**.

Every instance of a lock being removed must be entered in a written document kept by the **employer** for at least one year following the day on which the applicable energy control method is altered. **Section 206.** 

Further details on the Regulation Respecting Occupational Health and Safety can be found at <a href="Legisquebec.qc">Legisquebec.qc</a>.

## **SASKATCHEWAN**

The <u>Occupational Health and Safety Regulations</u> — Part 10 Sections 10-6(1) to (12) in Saskatchewan mandate that employers establish lockout procedures, provide suitable devices, and train workers.

# Locking out Procedures for Employers and Employees

- (1) Subject to section 10-7, before a worker undertakes the maintenance, repair, test, or adjustment of a machine other than a power tool, an **employer or contractor shall** ensure that the machine is locked out and remains locked out during that activity if not doing so would put the worker at risk.
- (2) Before a worker undertakes the maintenance, repair, test or adjustment of a power tool, an employer or contractor shall ensure that the energy source has been isolated from the power tool, any residual energy in the power tool has been dissipated and the energy source remains isolated during that activity.

# (3) An employer or contractor shall:

(a) provide a written lock-out process to each worker who is

required to work on a machine to which subsection (1) applies; and

- (b) if the lockout process uses a lock and key, issue to that worker a lock that is operable only by that worker's key and a duplicate key.
- (4) If the lockout process does not use a lock and key, **an employer or contractor shall** designate a person to coordinate and control the lockout process.
- (5) If the lockout process uses a lock and key, an **employer or contractor shall** designate a person to keep the duplicate key mentioned in clause (3) (b) and ensure that:
- (a) the duplicate key is accessible only to the designated person; and
- (b) a logbook is kept to record the use of the duplicate key and the reasons for that use.
- (6) If it is not practicable to use a worker's key to remove a lock, an **employer or contractor** may permit the person designated pursuant to subsection (5) to remove the lock if the designated person:
- (a) has determined the reason that the worker's key is not available;
- (b) has determined that it is safe to remove the lock and activate the machine; and
- (c) if a committee or representative is in place, has informed the co-chairpersons or the representative of the proposed use of the duplicate key before it is used.
- (7) An **employer or contractor shall** ensure that a designated person who is permitted to use a duplicate key pursuant to subsection (6):

- (a) records in the logbook the use of the duplicate key, the reason for its use and the date of its use; and
- (b) signs the logbook each time that the duplicate key is used.
- (8) If a central automated system controls more than 1 machine, an **employer or contractor shall** ensure that the machine to be maintained, repaired, tested, or adjusted is isolated from the central system before the lock-out procedures required by subsection (3) are implemented.
- (9) Before undertaking any maintenance, repairs, tests or adjustments to a machine to which subsection (1) applies, a worker shall lock out the machine following the process mentioned in clause (3) (a).
- (10) After a lock-out device has been installed or a lockout process has been initiated, the **worker** who installed the first lock or initiated the process **shall** check the machine to ensure that the machine is inoperative.
- (11) No person **shall** deactivate a lockout process that does not use a lock and key except the person designated pursuant to subsection (4).
- (12) No person **shall** remove a lock-out device except the worker who installed the lock-out device or the designated person acting in accordance with subsection (6). **Section 10 6(1).**

Further details on the Occupational Health and Safety Regulations can be found at <a href="mailto:saskatchewan.ca">saskatchewan.ca</a>.

# **YUKON**

Under Yukon's <u>Occupational Health and Safety Policy</u> — Sections 2.5(3), 2.5(6), 2.5(6) and <u>Workers' Safety and Compensation</u> <u>Board</u> — Part 3 Sections 3.01 to 3.10, employers are required

to develop lockout procedures, provide necessary devices, and train workers.

#### Power Equipment - General

No **employee shall** commence work on any electrical equipment until the equipment has been shut off and locked out as per the Company's Lockout Policy and Procedure. **Section 5.** 

#### Lock-Out/tag-Out

In order to ensure that the operation and maintenance of equipment, machinery and process lines is conducted safely, the Lock-Out Procedure must be adhered to: **Section 2.5(6)**.

#### **Isolation**

Where a worker could be injured by the unexpected energization or startup of machinery or equipment, or the unexpected release of an energy source, the energy source **shall** be isolated and effectively controlled. **Section 3.02.** 

## When Lockout Required

Whenever machinery or equipment is shut down for maintenance work, all energy-related hazards **shall** be effectively controlled before work is done.

# **During maintenance**

- (1) All parts and attachments **shall** be secured against inadvertent movement.
- (2) Energy-isolating devices **shall** be locked out as required by this Part.

#### **Normal Maintenance**

(3) Where machinery or equipment is in use for normal production work and is not effectively safeguarded to protect the workers, lockout procedures **shall** be followed. **Section** 

#### **Lockout Procedures**

- (1) Safe, effective lockout procedures, specific to the workplace, **shall** be developed and workers **shall** be trained in the safe and effective use of these procedures.
- (2) Lockout procedures **shall** provide a safe, orderly transfer of control of the lockout at shift change or such other times as is necessary.
- (3) Lockout procedures **shall** be explained verbally and given in writing to each worker.

#### Number of locks

(4) A sufficient number of locks suitable to the lockout procedure **shall** be supplied to each worker.

#### **Identification**

(5) Each personal lock **shall** be marked so the worker who applied it can be easily identified.

#### Combination locks

(6) Combination locks **shall** not be used for lockout procedures.

# **Specified locks**

(7) When an energy-isolating device is locked out, it **shall** be secured in the safe position with locks specified in the lockout procedure developed by the **employer**.

# **Application**

(8) Every worker **shall** correctly apply lockout procedures. **Section 3.04.** 

# Access To Energy-Isolating Devices

When an energy-isolating device is locked out, the lock **shall** not prevent access to other energy-isolating devices supplying machinery or equipment. **Section 3.06.** 

## Checking Locked Out Equipment - Verification of lockout

Workers **shall** be provided with and use procedures to verify that all energy sources have been effectively locked out. **Section 3.07.** 

# Worker responsibility

A worker who works on locked-out machinery or equipment **shall** ensure that:

- (a) the energy-isolating devices are locked out before starting work,
- (b) personal locks are removed on completion of the work, and
- (c) he or she maintains immediate control of the key(s) to his or her personal locks. **Section 3.08.**

#### Removal Of Locks

- (1) A personal lock **shall** only be removed by the worker who installed it unless the worker is unavailable.
- (2) If the worker is unavailable, the supervisor or manager in charge may remove the lock after:
- (a) ensuring that the machinery or equipment can be operated safely before removing the lock, and
- (b) making every reasonable effort to contact the worker who installed the lock.
- (3) The supervisor or manager **shall** notify the worker at the start of the next shift if the worker's personal lock(s) has been removed since the worker's previous shift. **Section 3.09.**

#### For more information:

- Power Equipment. **Section 2.5(3).**
- Non-electrical Lock-out and pit falls of lock-out systems. **Section 2.5(6)**.
- Section 3.01.
- Group lockout procedures. Section 3.05.
- Locks not required. Section 3.10.

Further details on the Occupational Health and Safety Policy and Workers' Safety and Compensation Board can be found at <a href="mailto:gov.yk.ca">gov.yk.ca</a> and <a href="mailto:wcb.yk.ca">wcb.yk.ca</a>.