Signaling — Know The Laws of Your Province



Signaling regulations are essential for ensuring clear communication and preventing workplace accidents, particularly in high-risk environments such as construction sites, roadwork zones, and industrial settings. These regulations require employers to implement standardized signaling systems, including hand signals, audible alarms, and visual indicators, to guide workers and equipment operators safely through hazardous areas. Proper signaling helps prevent collisions, enhances coordination, and improves overall workplace safety. Employers must ensure that workers receive proper training on signaling methods, understand the meaning of different signals, and follow established procedures to maintain clear effective communication. While general signaling requirements apply across Canada, specific regulations vary by province and territory to address industry-specific hazards and working conditions. Compliance with these regulations minimizes workplace risks, enhances operational efficiency, and fosters a culture of safety in environments where signaling is critical.

FEDERAL

In Canada, employers are required to address signaling under the <u>Canada Occupational Health and Safety Regulations</u> — Part XIV Materials Handling, Sections 14.25 to 14.27. These regulations mandate that proper signaling systems be used to ensure safe coordination between workers, equipment operators, and other personnel in material handling operations.

Part XIV - Materials Handling

Signals

No employer **shall** require an operator to operate motorized materials handling equipment unless the operator:

- (a) is directed by a signaler; or
- (b) has an unobstructed view of the area in which the equipment is to be operated. Section 14.25.
- (1) Every employer who wishes to use signals to direct the movement of motorized materials handling equipment **shall** establish a single code of signals to be used by signalers in all of the employer's workplaces.
- (2) Subject to subsection (3), signals from the code referred to in subsection (1) **shall** be given by a signaler, who may use only those signals.
- (3) A signal to stop given by any person granted access to the workplace by the employer **shall** be obeyed by an operator.
- (4) No signaler **shall** perform duties other than signaling while the motorized materials handling equipment under the signaler's direction is in operation.
- (5) Where any movement of motorized materials handling equipment that is directed by a signaler poses a risk to the safety of any person, the signaler **shall** not give the signal to move until that person is warned of, or protected from, the risk.
- (6) Where the operator of any motorized materials handling equipment does not understand a signal, the operator shall consider that signal to be a stop signal. Section 14.26(1) to (5).
- (1) Subject to subsection (2), where the use by a signaler of visual signals will not be an effective means of communication, the employer **shall** provide the signaler and the

operator with a telephone, radio or other audible signaling device.

- (2) No radio transmitting equipment **shall** be used in a workplace for the transmission of signals where such use may activate electric blasting equipment in that place.
- (3) Where a signaling device referred to in subsection (1) functions unreliably or improperly and the operation of any motorized materials handling equipment cannot be safely directed by another means of signaling, use of the motorized materials handling equipment **shall** be discontinued until the signaling device is repaired or replaced.
- (4) If an employee finds any defect in radio transmitting signaling equipment that may render it unsafe for use, they shall report the defect to their employer as soon as feasible. Section 14.27(1) to (4).

Further details on the Canada Occupational Health and Safety Regulations can be found at <u>Laws-lois.justice.gc.ca</u>.

ALBERTA

In Alberta, employers are required to address signaling under the Occupational Health and Safety Code — Part 12 General Safety Precautions, Section 191, and Part 19 Powered Mobile Equipment, Section 267. These regulations mandate that proper signaling systems be implemented to ensure safe communication between workers, equipment operators, and other personnel, particularly in high-risk environments such as construction sites, warehouses, and industrial workplaces.

Part 12 - General Safety Precautions

Signalers

- (1) If this Code requires signals to be given by a designated signaler, an employer **must** designate a competent worker to give the signals.
- (2) An employer must ensure that, if the designated signaler

uses hand signals, the signaler wears highvisibility safety apparel that clearly identifies the worker as a designated signaler.

- (3) A designated signaler using hand signals **must** wear the highvisibility safety apparel **required** by the employer under subsection (2).
- (4) Before giving a signal to proceed, a designated signaler must ensure that there are no hazards in the vicinity.
- (5) If a signaler is designated, an equipment operator **must** take signals only from the designated signaler.
- (6) An employer **must** ensure that only one designated signaler at a time gives signals to an equipment operator.
- (7) Despite subsections (5) and (6), an equipment operator **must** take a "STOP" signal from a worker who is not a designated signaler.
- (8) Despite subsections (5) and (6), if signals cannot be transmitted properly between a designated signaler and an equipment operator, an employer must ensure that
 - (a) additional designated signalers are available to transmit signals, or
 - (b) a means of ensuring clear and complete communication other than using designated signalers is provided. Section 191(1) to (8).

Part 19 — Powered Mobile Equipment

Warning Signal

- (1) An employer **must** ensure that, if a powered mobile equipment operator's view of the equipment's path of travel is obstructed or cannot be seen directly or indirectly in a direction, the powered mobile equipment has:
 - (a) an automatic audible warning device that
 - (i) activates if the equipment controls are positioned to move the equipment in that direction, and
 - (ii) is audible above the ambient noise level,

- (b) a warning device or method appropriate to the hazards of the work site, or
- (c) an automatic system that stops the equipment if a worker is in its path.
- (2) If it is impractical to equip powered mobile equipment in accordance with subsection (1), the operator **must** ensure that the operator and other workers are protected from injury before moving the equipment by:
 - (a) doing a visual inspection on foot of the area into which the equipment will move,
 - (b) following the directions of a traffic control or warning system,
 - (c) getting directions from a designated signaller or other worker who
 - (i) has an unobstructed view of the area into which the equipment will move, or
 - (ii) is stationed in a safe position in continuous view of the operator,

or

(d) ensuring all other workers are removed from the area into which the equipment will move. Section 267(1)(2).

Further details on the Occupational Health and Safety Code can be found at *Alberta.ca*.

BRITISH COLUMBIA

In British Columbia, employers are required to address signaling under the Occupational Health and Safety Regulation — Part 14 Cranes and Hoists, Sections 14.47 and 14.48, and Part 18 Traffic Control, Sections 18.5, 18.6, and 18.12 to 18.14. These regulations mandate the use of effective signaling systems to ensure safe communication between workers, equipment operators, and traffic controllers in

hazardous work environments.

Part 14 - Cranes and Hoists

Signals

- (1) When the operator of a crane or hoist does not have a clear and unobstructed view of the boom, jib, load line, load hook and load throughout the whole range of the hoisting operation, the operator **must** act only on the directions of a qualified signaler who has a clear view of the things the operator cannot see.
- (2) The operator of the crane or hoist **must** stop the operation of the equipment on receiving a stop signal from any person. **Section 14.47 (1)(2).**

Alternative to Hand Signals

- (1) Two-way radio or other audio or video systems acceptable to the Board **must** be used if distance, atmospheric conditions or other circumstances make the use of hand signals hazardous or impracticable.
- (2) Audio and video communication systems used in a hoisting operation **must** be designed, installed, operated and maintained according to a standard acceptable to the Board. **Section 14.48(1)(2)**.

Part 18 - Traffic Control

Placement of Traffic Control Signs and Devices

- (1) Traffic control signs and devices **must** be positioned and used as specified in the *Traffic Control Manual* and signs and devices **must** be located so as to allow traffic to move by or through the work area in a controlled manner and, if necessary, to come to a controlled stop with due regard for the prevailing weather and road conditions.
- (2) Unless otherwise specified, all traffic control signs and devices **must** be installed and removed in a sequence which best

protects workers during this phase of a traffic control operation.

- (3) A sign advising of a traffic control person ahead **must** be placed in advance of each traffic control person's station, and this sign **must** be removed promptly when a traffic control person is no longer on duty at that station.
- (4) Subsection (3) does not apply during emergency or brief duration work when it is not practicable to place such a sign, provided that sight lines and traffic speed allow oncoming traffic adequate warning of the work activity taking place. Section 18.5(1) to (4).

Traffic Control Persons (TCPs)

Use of a Traffic Control Person

- (1) A traffic control person may be used only:
 - (a) if the use of signs and other traffic control devices and procedures alone cannot provide effective traffic control, or
 - (b) during emergency or brief duration work if it is not practicable to control traffic with signs and other devices and procedures.
- (2) Without limiting the generality of subsection (1), one or more traffic control persons **must** be used if:
 - (a) it is necessary to institute a one-way traffic system by or through a work zone and the circumstances do not allow self-regulating single lane traffic controlled by signs and other devices as specified in the *Traffic Control Manual*, and a traffic signal system is not used,
 - (b) work-related traffic cannot safely self-regulate to move in or out of the work area or safely coordinate with other traffic,
 - (c) an existing traffic control system, or an existing traffic signal light system, is not adequate to regulate traffic,

- (d) the work encroaches into an intersection so as to interfere with regular traffic movement,
- (e) traffic speed or volume is a hazard to workers while setting up or removing other traffic control devices, or
- (f) other traffic control devices are not available in an emergency situation. Section 18.6(1)(2).

Signals by Traffic Control Persons

Precise Motions

A traffic control person **must** make all traffic control directions and signals precisely and deliberately so that the meaning can be clearly understood. **Section 18.12.**

Standard Signals Between Traffic Control Persons

If manual signals are used between traffic control persons to initiate changes in the direction of traffic flow, the signals shown in Figure 18-1 must be used. Section 18.13.

Standard Signals for Traffic

- (1) All traffic control directions and signals made by a traffic control person for the purpose of controlling traffic **must** conform to the requirements of this Regulation and the *Traffic Control Manual*.
- (2) A traffic control person **must** use the normal signals shown in Figure 18-2 when stationed on the driver's (left) side of the traffic lane under the TCP's control.
- (3) The alternative signals shown in Figure 18-2 must be used only when the traffic control person is stationed on the passenger's (right) side of the traffic lane under the TCP's control.
- (4) A traffic control person **must** not use their traffic control paddle to wave traffic on and **must** never display the paddle to traffic in other than a static manner. **Section 18.14(1) to (4).**

Further details on the Occupational Health and Safety Regulation can be found at <u>BClaws.gov.bc.ca</u>

MANITOBA

In Manitoba, employers are required to address signaling under the Workplace Safety and Health Act and Regulation — Part 20 Vehicular and Pedestrian Traffic, Sections 20.6 to 20.8. These regulations mandate the use of proper signaling systems to ensure safe interaction between vehicles, equipment operators, and pedestrians in workplaces such as construction sites, warehouses, and roadwork zones.

Flag Persons

- (1) No employer **shall** require or permit a worker to work as a flag person unless the worker:
 - (a) holds a valid flag person's training certificate issued by a person or organization that has been approved by the director under section 20.6.2; and
 - (b) has demonstrated competency in applying the training referred to in clause 20.5(1)(b) and subsection 20.6.2(2) to the employer's workplace.
- (2) An employer **must** ensure that a flag person:
 - (a) carries his or her flag person's training certificate at all times;
 - (b) is provided with
 - (i) a paddle with reflective surfaces, on one side of which is written "STOP" in white letters on a red background, and on the other side is written "SLOW" in black letters on a fluorescent yellow-green background, (ii) high visibility safety apparel that meets the Class 3 Level 2 requirements of CSA Z96-15, High Visibility Safety Apparel, and that is fluorescent yellow-green in colour,

- (iii) protective headwear of a fluorescent colour, augmented during hours of darkness with a retro-reflective material or combined materials securely attached to the headwear in such a manner as to provide 360o visibility to others, and
- (iv) a means of communication with any other flagperson at the workplace, when the worker does not have a clear view of that other flagperson; and (c) in the case of a flagperson who works during hours of darkness, a fully operational flashlight fitted with a red signaling wand of sufficient brightness to be clearly visible to approaching traffic.
- (3) Except for the means of communication provided under subclause (2):
 - (b)(iv), an employer **must** ensure that a flagperson does not use any personal electronic device, including
 - (a) a portable radio, cassette player, compact disk player or recorder, mp3 player or other digital music recorder and player, that is worn on the body,
 - (b) a personal digital assistant or other similar handheld device, or
 - (c) a cellular telephone.
- (4) Section 6.7 does not apply to a flagperson, but the high visibility safety apparel, protective headwear and flashlight provided by an employer under clause (2)(b) and (c) are personal protective equipment and the obligations of the employer and the worker under sections 6.3 to 6.5 apply to the apparel, headwear, and flashlight.
- (5) The employer **must** ensure that the high visibility apparel or headwear referred to in clause (2)(b) is immediately replaced if it:
 - (a) is faded, torn, dirty or otherwise rendered ineffective, or
 - (b) does not display a CSA certification label. Section

20.6(1) to (5).

Use of Warning Signs

When an employer posts warning signs to advise persons that a flag person is present, the signs must:

- (a) have reflective surfaces; and
- (b) be fluorescent yellow-green in colour. Section
 20.6.1.

For more information:

- Training certificate for flag persons. Section 20.6.2(1)
 to (4).
- Signal person on construction site. Section 20.7(1)(2).
- Reverse warnings. Section 20.8.

Further details on the Workplace Safety and Health Act and Regulation can be found at <u>Gov.MB.ca</u>.

NEW BRUNSWICK

In New Brunswick, employers are required to address signaling under the Occupational Health and Safety Act — Part X Construction, Traffic, and Building Safety, Section 91, Part XIII Excavations and Trenches, Section 186, and Part XV Materials Handling Equipment and Personnel Carrying Equipment, Sections 211(2), 212, 215, 226, and 230.31. These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and pedestrians in high-risk environments such as construction sites, excavation areas, and material handling operations.

Part X - Construction, Traffic, and Building Safety

When Signalers Required — Traffic Safety

(1) Where construction is being carried out in an area where an employee's safety may be endangered by vehicular traffic,

an employer **shall** provide competent signalers to control the flow of traffic.

- (2) An employer **shall** provide high visibility safety apparel that meets the requirements of CSA standard Z96-15 (R2020), *High-visibility safety apparel* or a standard offering equivalent or better protection to any employee who is exposed to a risk of injury from vehicular traffic, powered mobile equipment, industrial lift trucks or mobile cranes, and the employee **shall** wear the apparel.
- (3) An employer **shall** provide and all signalers **shall** use reflectorized paddles to control the flow of traffic. **Section** 91(1) to (3).

Part XIII - Excavations and Trenches

Material Lowered into Excavation or Trench

An employer **shall** ensure that an operator of powered mobile equipment or a mobile crane does not lower material into an excavation or trench, and no such operator **shall** lower material into an excavation or trench, unless:

- (a) the operator has unrestricted visibility, or
- (b) a signaler is used to direct the movement of the material. Section 186(a)(b).

Part XV — Materials Handling Equipment and Personnel Carrying Equipment

Procedures Respecting Operation

- (1) An employer **shall** ensure that an operator of a hoisting apparatus follows the procedures prescribed in subsection (2).
- (2) An operator of a hoisting apparatus shall:
 - (a) visually inspect the hoisting apparatus before use to verify that it is in safe working order,
 - (b) where the operator has restricted vision, including restricted vision of electrical utility lines, move a load

only on a signal from a signaler designated under section 212,

- (c) raise a load vertically unless it is necessary to raise a load obliquely,
- (d) when raising a load obliquely, ensure that the hoisting apparatus is suitable for lifting a load at an oblique angle and that any pendulum effect does not constitute a hazard to persons working in the vicinity,
- (e) not carry a load over any person,
- (f) not leave a suspended load unattended if a person may be in the area under the load, and
- (g) ensure that where a pendulum effect may constitute a hazard to persons working in the vicinity, one or more guide ropes are used to control the load. Section 211(1)(2).

Signaler and Direction of Operation

An employer **shall** designate a competent employee to be a signaler to direct, by means of visual or auditory signals, the safe movement and operation of a hoisting apparatus by an operator, and **shall** ensure that the signaler:

- (a) is readily identifiable by the operator,
- (b) governs the movement of a load by a well understood distinctive code of signals or another effective communication system,
- (c) obtains the assistance of another signaler if part of the view of the load is obstructed from both the signaler and the operator, and
- (d) verifies that all ropes, chains, slings or other attachments are properly applied to the load and secured to the hooks of the hoisting apparatus and that the area is clear before signaling to move the load. Section 212.

For more information:

Moving crane from location. Section 215.

- When signaler required. Section 226.
- When signaler required. Section 230.31(1).
- Precautions when operated on a slope or bank. Section 230.31(2).
- Hazard created by dust. Section 230.31(3).

Further details on the Occupational Health and Safety Act can be found at Laws. GNB.ca.

NEWFOUNDLAND & LABRADOR

n Newfoundland and Labrador, employers are required to address signaling under the Occupational Health and Safety Regulations — Part XII Powered Mobile Equipment, Section 272, Part XIV Cranes, Hoists, and Other Lifting Equipment, Sections 317, 321, and 322, and Part XVI Traffic Control, Sections 374 and 375. These regulations mandate the use of effective signaling systems to ensure safe communication between workers, equipment operators, and traffic controllers in hazardous work environments such as construction sites, material handling operations, and roadwork zones.

Part XII - Powered Mobile Equipment

Obstructed View

Where a mobile equipment operator's view of the work area is obstructed, the operator **shall** not move the equipment until precautions have been taken to protect the operator and another worker from injury, including:

- (a) immediately before the movement, the inspection by the operator on foot of the area into which the equipment is being moved;
- (b) direction by a signaller
 - (i) stationed in a safe position in continuous view of the operator,
 - (ii) having an unobstructed view of the area into which

the equipment is being moved, and (iii) not being otherwise occupied while the equipment is in motion; or

(c) direction by a traffic control or warning system. **Section 272.**

Part XIV - Cranes, Hoists, and Other Lifting Equipment

Travelling with a Load

- (1) Where an operator is travelling with a load, the operator **shall** ensure that the load is carried as close to the ground or grade as possible and that it is rigged to control load swing.
- (2) Where necessary, a worker designated as a signaller **shall** walk ahead of a moving load and warn workers to keep clear. **Section 317(1)(2).**

Signals

The operator of a crane or hoist **shall** act only on the directions of a designated and competent signaller where the operator does not have a clear and unobstructed view of the load hook and load throughout the whole range of the hoisting operation. **Section 321.**

Alternative to Hand Signals

Two-way radio or other audio or video systems **shall** be used where distance, atmospheric conditions or other circumstances make the use of hand signals hazardous or impracticable. **Section 322.**

Part XVI - Traffic Control

Traffic Control Person

- (1) A traffic control person shall be employed:
 - (a) according to the criteria established by the Department

- of Transportation and Works "Traffic Control Specification"; or
- (b) where **required** by an officer and where one may be necessary under the particular circumstances.

(2) A traffic control person shall:

- (a) stand in a safe position, preferably on the driver's side of the lane under the traffic control person's control, be clearly visible, and have an unobstructed view of approaching traffic; and
- (b) be positioned at least 25 metres away from the work area unless circumstances or space requirements, including working at or near an intersection, dictate otherwise.
- (3) Where 2 or more traffic control persons are working as a team, the employer **shall** ensure that one traffic control person is responsible for traffic co-ordination and for the initiation of changes in the direction of traffic flow in order to create a cycle which results in minimum traffic delay and maximum protection for the workers.
- (4) Traffic control persons **shall** perform their duties responsibly and in accordance with the Department of Transportation and Works "Traffic Control Manual".
- (5) A person **shall** not work as a traffic control person after January 1, 2011 unless the person has completed a traffic control training program prescribed by the commission. **Section** 374(1) to (5).

Traffic Control Signals

- (1) An employer **shall** ensure that where traffic control persons are working as a team, methods of communication **shall** be determined and understood by personnel using them before the commencement of the flagging operations.
- (2) Where traffic is diverted onto dusty surfaces, good visibility **shall** be maintained by the suppression of dust through periodic application of an approved substance. **Section**

375(1)(2).

Further details on the Occupational Health and Safety Regulations can be found at <u>Assembly.NL.ca</u>.

NOVA SCOTIA

In Nova Scotia, employers are required to address signaling under the Occupational Health and Safety Regulations — Part 7 Hoists and Mobile Equipment, Section 57. These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and other personnel involved in the operation of hoists and mobile equipment in workplaces such as construction sites, warehouses, and industrial facilities.

Part 7 — Hoists and Mobile Equipment

Signaler

- (1) An employer **shall** designate one or more competent persons as a signaller to direct the safe movement of a load, hoist, lift truck or powered mobile equipment where the operator of that hoist, lift truck or powered mobile equipment:
 - (a) does not have an adequate view of the load;
 - (b) does not have a clear view of the route the load is to take;
 - (c) is not able to see clearly around the equipment when moving and has not taken measures sufficient to ensure that no person is exposed to a hazard as a result of the movement of equipment;
 - (d) is not able to see clearly where the hoist or its load may encroach the minimum distance specified in Section 126 or a hoist is positioned closer than the length of its boom to an overhead energized power line or power line equipment; or
 - (e) is causing the equipment to move under its own power

from one location to another and the situation creates a hazard in the workplace.

(2) A signaler shall:

- (a) be readily identifiable to the operator;
- (b) direct the movement of a load or equipment by a well understood distinctive code of hand signals or another effective communication system;
- (c) warn the operator each time
 - (i) any part of the hoist or its load may encroach on the minimum distance specified in Section 126, or
 - (ii) the hoist is positioned closer than the length of its boom from an overhead energized power line or power line equipment; and
- (d) obtain the assistance of another signaler if all or part of the view of the load or route is obstructed from both the signaler and the operator.
- (3) An operator of a hoist, lift truck or powered mobile equipment in a situation referred to in subsection (1) shall move a load only on a signal from a signaler. Section 57(1) to (3).

Further details on the Occupational Health and Safety Regulations can be found at *NovaScotia.ca*

NORTHWEST TERRITORIES

In the Northwest Territories, employers are required to address signaling under the Official Consolidation of Occupational Health and Safety Regulations — Part 9 Safeguards, Storage, Warning Signs, and Signals, Sections 138 and 139, Part 13 Hoists, Cranes, and Lifting Devices, Sections 216 and 225(6), and Part 29 Forestry and Mill Operations, Sections 436(9) to 436(11). These regulations mandate the use of effective signaling systems to ensure safe communication

between workers, equipment operators, and other personnel in high-risk environments such as construction sites, forestry operations, and industrial facilities.

Part 9 - Safeguards, Storage, Warning Signs, and Signals

Designated Signalers

- (1) If the giving of signals by a designated signaler is required by these regulations, an employer shall:
 - (a) designate a worker to be the designated signaler;
 - (b) ensure that the designated signaler is trained to carry out their duties to ensure the signaler's safety and the safety of other workers; and
 - (c) keep a record of the training provided and give a copy of the record to the designated signaler.

(2) An employer shall:

- (a) provide each designated signaler with, and require the signaler to use, a high visibility vest, armlets or other high visibility clothing; and
- (b) provide each designated signaler with a suitable light to signal with during hours of darkness as defined in section 161 and in conditions of poor visibility.

(3) An employer **shall:**

- (a) install suitably placed signs to warn traffic of the presence of a designated signaler before the signaler begins work; and
- (b) if reasonably possible, install suitable overhead lights to illuminate effectively a designated signaler.
- (4) A designated signaler **shall** ensure that it is safe to proceed with a movement before signaling for the movement to proceed.
- (5) If the giving of signals by a designated signaler is required by these regulations, an employer shall ensure that:

- (a) only a worker who is the designated signaler gives signals to an operator of any equipment other than in an emergency; and
- (b) only one designated signaler gives signals to an operator at a time.
- (6) If hand signals cannot be transmitted properly between a designated signaler and an operator, an employer **shall** ensure that additional designated signalers are available to make effective transmissions of signals, or some other means of communication is provided.
- (7) If two or more designated signalers are used, an employer **shall** ensure that the designated signalers are able to communicate effectively with each other. **Section 138(1) to** (7).

Part 13 - Hoists, Cranes, and Lifting Devices

Designated Signaler

- (1) An employer **shall** make use of a designated signaler if the operator of a hoist or crane does not have a clear, unobstructed view of any of the following throughout the whole range of movement of the load or hook:
 - (a) the pick-up point;
 - (b) the setting point and the load;
 - (c) the hook, if there is no load.
- (2) Before a hoisting operation begins, an employer **shall** ensure that the operator of the hoist or crane reviews with the designated signaler the signals to be used.
- (3) If a hand signal is to be used in connection with a hoist or crane, an employer **shall** ensure that the signal used is:
 - (a) appropriate for the activity to be carried out; and
 - (b) set out in an approved standard.
- (4) An operator of a hoist or crane and a designated signaler

shall use the signal set out in the standard referred to in paragraph (3)(b) that is appropriate for the activity to be carried out. **Section 216(1) to (4).**

For more information:

- Risk from Vehicular Traffic. Section 139(1) to (7).
- Part 29 Forestry and Mill Operations Loading, Unloading and Hauling Logs. Section 436(9)(10).

Further details on the Official Consolidation of Occupational Health and Safety Regulations can be found at *Canlii.org*.

NUNAVUT

In Nunavut, employers are required to address signaling under the Official Consolidation of Occupational Health and Safety Regulations — Part 9 Safeguards, Storage, Warning Signs, and Signals, Sections 138 and 139, Part 13 Hoists, Cranes, and Lifting Devices, Sections 216 and 225(6), and Part 29 Forestry and Mill Operations, Sections 436(9) to 436(11). These regulations mandate the use of effective signaling systems to ensure safe communication between workers, equipment operators, and other personnel in high-risk environments such as construction sites, forestry operations, and industrial facilities.

Part 9 — Safeguards, Storage, Warning Signs, and Signals

Designated Signalers

- (1) If the giving of signals by a designated signaler is required by these regulations, an employer shall:
 - (a) designate a worker to be the designated signaler;
 - (b) ensure that the designated signaler is trained to carry out their duties to ensure the signaler's safety and the safety of other workers; and
 - (c) keep a record of the training provided and give a copy

of the record to the designated signaler.

(2) An employer shall:

- (a) provide each designated signaler with, and require the signaler to use, a high visibility vest, armlets or other high visibility clothing; and
- (b) provide each designated signaler with a suitable light to signal with during hours of darkness as defined in section 161 and in conditions of poor visibility.

(3) An employer shall:

- (a) install suitably placed signs to warn traffic of the presence of a designated signaler before the signaler begins work; and
- (b) if reasonably possible, install suitable overhead lights to illuminate effectively a designated signaler.
- (4) A designated signaler **shall** ensure that it is safe to proceed with a movement before signaling for the movement to proceed.
- (5) If the giving of signals by a designated signaler is required by these regulations, an employer shall ensure that:
 - (a) only a worker who is the designated signaler gives signals to an operator of any equipment other than in an emergency; and
 - (b) only one designated signaler gives signals to an operator at a time.
- (6) If hand signals cannot be transmitted properly between a designated signaler and an operator, an employer **shall** ensure that additional designated signalers are available to make effective transmissions of signals, or some other means of communication is provided.
- (7) If two or more designated signalers are used, an employer **shall** ensure that the designated signalers are able to communicate effectively with each other. **Section 138(1) to**

Part 13 - Hoists, Cranes, and Lifting Devices

Designated Signaler

- (1) An employer **shall** make use of a designated signaler if the operator of a hoist or crane does not have a clear, unobstructed view of any of the following throughout the whole range of movement of the load or hook:
 - (a) the pick-up point;
 - (b) the setting point and the load;
 - (c) the hook, if there is no load.
- (2) Before a hoisting operation begins, an employer **shall** ensure that the operator of the hoist or crane reviews with the designated signaler the signals to be used.
- (3) If a hand signal is to be used in connection with a hoist or crane, an employer **shall** ensure that the signal used is:
 - (a) appropriate for the activity to be carried out; and
 - (b) set out in an approved standard.
- (4) An operator of a hoist or crane and a designated signaler **shall** use the signal set out in the standard referred to in paragraph (3)(b) that is appropriate for the activity to be carried out. **Section 216(1) to (4)**.

For more information:

- Risk from Vehicular Traffic. Section 139(1) to (7).
- Part 29 Forestry and Mill Operations Loading,
 Unloading and Hauling Logs. Section 436(9)(10).

Further details on the Official Consolidation of Occupational Health and Safety Regulations can be found at <u>Canlii.org</u>.

ONTARIO

In Ontario, employers are required to address signaling under the <u>O. Reg. 213/91: Construction Projects</u> – Part II General Construction, Sections 67(2) and 69, as well as Sections 104 to 106, 167(3), 188(8)(9), 293 to 296. These regulations mandate the use of effective signaling systems to ensure safe communication between workers, equipment operators, and traffic controllers in high-risk environments such as construction sites, material handling areas, and roadwork zones.

Part II - General Construction

- (1) This section applies with respect to directing vehicular traffic that may be a hazard to workers on a public way.
- (2) A worker **shall** not direct vehicular traffic for more than one lane in the same direction. O. Reg. 145/00, s. 23.
- (3) A worker **shall** not direct vehicular traffic if the normal posted speed limit of the public way is more than 90 kilometres per hour.
- (4) A worker who is required to direct vehicular traffic,
 - (a) shall be a competent worker;
 - (b) **shall** not perform any other work while directing vehicular traffic;
 - (c) **shall** be positioned in such a way that he or she is endangered as little as possible by vehicular traffic; and
 - (d) **shall** be given adequate written and oral instructions, in a language that he or she understands, with respect to directing vehicular traffic, and those instructions **shall** include a description of the signals that are to be used.
- (5) The written instructions referred to in clause (4) (d) shall be kept at the project. Section 69(1) to (5).
- (1) Every project **shall** be planned and organized so that vehicles, machines and equipment are not operated in reverse or are operated in reverse as little as possible.

- (2) Vehicles, machines and equipment at a project **shall** not be operated in reverse unless there is no practical alternative to doing so.
- (3) Operators of vehicles, machines and equipment **shall** be assisted by signalers if either of the following applies:
 - 1. The operator's view of the intended path of travel is obstructed.
 - 2. A person could be endangered by the vehicle, machine or equipment or by its load.
- (4) Subsection (3) also applies to shovels, backhoes and similar excavating machines and to cranes and similar hoisting devices.
- (5) The operator and the signaler **shall**,
 - (a) jointly establish the procedures by which the signaler assists the operator; and
 - (b) follow those procedures.
- (6) If subsection (3) applies to the project and it is not possible to carry out the project without some operation of vehicles and equipment in reverse, signs **shall** be posted at the project in conspicuous places warning workers of the danger. **Section 104(1) to (5)**.

A dump truck **shall** be equipped with an automatic audible alarm that signals when the truck is being operated in reverse. **Section 105**.

- (1) A signaler **shall** be a competent worker and **shall** not perform other work while acting as a signaler.
- (1.1) The signaler **shall** wear a garment that covers at least his or her upper body and has the following features:
- 1. The garment **shall** be fluorescent blaze or international orange in colour.

- 2. On the front and the back, there **shall** be two yellow stripes that are 5 centimetres wide. The yellow area **shall** total at least 500 square centimetres on the front and at least 570 square centimetres on the back.
- 3. On the front, the stripes **shall** be arranged vertically and centred and **shall** be approximately 225 millimetres apart, measured from the centre of each stripe. On the back, they **shall** be arranged in a diagonal "X" pattern.
- 4. The stripes shall be retro-reflective and fluorescent.
 - (1.2) If the garment is a vest, it **shall** have adjustable fit.
 - (1.3) A nylon vest to which this section applies **shall** also have a side and front tear-away feature.
 - (1.4) In addition, a signaler who may be endangered during night-time hours **shall** wear retro-reflective silver stripes encircling each arm and leg, or equivalent side visibility-enhancing stripes with a minimum area of 50 square centimetres per side.
 - (1.5) The employer shall,
 - (a) ensure that the signaler has received adequate oral training in his or her duties and has received adequate oral and written instructions in a language that he or she understands; and
 - (b) keep the written instructions at the project.
- (2) A signaler,
 - (a) **shall** be clear of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load;
 - (b) Revoked: 0. Reg. 241/23, s. 4 (1).
 - (c) **shall** have a clear view of the intended path of travel of the vehicle, machine or equipment, crane or similar

hoisting device, shovel, backhoe or similar excavating machine or its load; and

- (d) **shall** watch the part of the vehicle, machine or equipment or crane or similar hoisting device, shovel, backhoe, or similar excavating machine or its load whose path of travel the operator cannot see.
 - (2.1) A signaler **shall**, where practicable, be in full view of the operator of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine and, where not practicable, the employer **shall** provide another means of ensuring clear and direct communication from any signalers to the operator.
- (3) The signaler **shall** communicate with the operator by means of a telecommunication system or, where visual signals are clearly visible to the operator, by means of prearranged visual signals. **Section 106(1) to (3)**.

For more information:

- Worker measures at projects in vehicular traffic.Section 67(2).
- Helicopter pilots hoisting. Section 167(1) to (4).
- Competent workers. Section 188.
- Signal code for hoisting. Section 293(1) to (5).
- Supervisor in charge of projects. Section 294.
- Shaft attendants at projects. Section 295.

Further details on the O. Reg. 213/91: Construction Projects can be found at <u>Ontario.ca</u>.

PRINCE EDWARD ISLAND

In Prince Edward Island, employers are required to address signaling under the Occupational Health and Safety Act General Regulations — Part 12 Excavations, Trenches, and Construction,

Section 12.12, Part 34 Hoisting Apparatus, Sections 34.6, 34.7, and 34.11, and Part 50 Traffic Control, Sections 50.1(a) and 50.3 to 50.18. These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and traffic controllers in high-risk environments such as construction sites, excavation zones, and roadwork areas.

Part 12 - Excavations, Trenches, and Construction, Section 12.12.

Illumination of Materials

(1) When materials piled along the sides of any excavation or trench interfere with the flow of traffic, the employer **shall** ensure that the material is adequately illuminated by warning lights.

Signs

(2) When construction work is being carried out which interferes with the flow of traffic, the employer **shall** ensure that adequate warning signs are posted in both directions not less than 225 m (738 ft.) from the worksite, and at any intersection between the warning signs.

Signalers

(3) When construction work is being carried out in areas where worker safety is endangered by vehicle traffic, the employer **shall** provide trained signalers to control the flow of traffic.

Reflectorized Vests

(4) The employer **shall** provide and all signalers **shall** wear a reflectorized vest or jacket when controlling the flow of traffic.

Reflectorized Paddles

(5) The employer **shall** provide and all signalers **shall** use reflectorized paddles to control the flow of traffic. **Section** 12.12 (1) to (5).

Responsibilities of Employer

(1) The employer **shall** ensure that the operator of hoisting apparatus follows the procedures prescribed in subsection (3).

Barriers

(2) The employer **shall** ensure that when mobile cranes are working in an area where the swing clearance of an obstruction is less than 600 mm (2 ft.), adequate barriers are installed to prevent workers from entering the area.

Responsibilities of Operator

- (3) The operator of hoisting apparatus shall:
 - (a) visually inspect the hoisting apparatus before use to verify that it is in safe working order;
 - (b) move a load only on a signal from a signaler designated under section 34.7 unless he has an unobstructed view of the load at all times during the operation;
 - (c) raise a load vertically or, if necessary to raise a load obliquely, take precautions to avoid endangering workers;
 - (d) avoid carrying a load over workers;
 - (e) not leave a suspended load unattended.

Tag Lines

(4) The employer **shall** ensure that a tag line or guide rope is used to control loads which may swing while being moved. **Section 34.6(1) to (3).**

Signals

(1) The employer **shall** ensure that the operator of a hoisting apparatus moves a load only on a signal from a signaler designated under this section.

Responsibilities of Signaler

- (2) The signaler designated under subsection (1) shall:
 - (a) be identifiable;
 - (b) govern the movements of a load by a well understood distinctive code of signals or an effective communication system;
 - (c) obtain the assistance of another competent signaler if part of the view of the load is obstructed from both the signaler and the operator;
 - (d) ensure that all ropes, chains, slings or other attachments are properly applied to the load and secured to the hooks of the hoisting apparatus and that the area is clear before signaling to move the load. Section 34.7(1)(2).

For more information:

- Change of location. Section 34.11.
- Part 50 Traffic Control. Sections 50.1(a) and 50.3 to 50.18.
- Definitions Sections. 50.1 and 50.3.
- Qualifications. Section 50.4.
- Use of worker as signaler. Section 50.5.
- Equipment. Section 50.6.
- Head set receivers. Section 50.8.
- Sign. Section 50.9.
- Reflectors. Section 50.10.
- Flashlight. Section 50.11.
- Visibility. Section 50.12.
- Distance. Section 50.13.
- Radio contact. Section 50.14.
- Approved modes of signaling. Section 50.15.

Other. Sections 50.16, 50.17, and 50.18.

Further details on the Occupational Health and Safety Act General Regulations can be found at PrinceEdwardIsland.ca.

QUÉBEC

In Québec, employers are required to address signaling under the Regulation Respecting Occupational Health and Safety in Mines — Division VI Motorized Vehicles, Section 209, Division VIII Various Installations, Section 368, and Division X Handling and Use of Explosives, Section 449. These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and other personnel in high-risk mining environments where heavy machinery, explosives, and hazardous installations are present.

Division VI - Motorized Vehicles

Signaler

In every truck loading or unloading area where there is a signaler directing the movements of motorized vehicles:

- (1) the vehicles may not move in the truck loading or unloading area until they have received a signal from the signaler to do so;
- (2) only one signaler may be allowed in each truck loading or unloading area;
- (3) no other person may circulate on foot in such area without prior permission from the signaler;
- (4) the signaler may not allow anyone to circulate on foot in that area unless he has stopped all the vehicles circulating in the area;
- (5) the signaler **shall** wear an orange vest with reflective strips. **Section 209(1) to (5)**.

Division VIII - Various Installations

When a load **shall** be moved by means of a hoisting apparatus, the operator of the equipment **shall** act only in accordance with the signals received from the loading and unloading area. These signals **shall** be transmitted by gestures or a telecommunications system when the signaler is out of sight of the operator. **Section 368**.

Division X — Handling and Use of Explosives

A motorized vehicle may not be driven, parked or stopped over loaded drill holes unless:

- (1) the detonator wires and explosives are completely inserted under the collar of the holes;
- (2) the collar of the holes is covered with sand or rock dust;
- (3) a signaler supervises the movements of the vehicle to see that its wheels or tracks do not pass directly over the holes so protected. **Section 449**

Further details on the Regulation Respecting Occupational Health and Safety in Mines can be found at <u>Legisquebec.gouv.QC.ca</u>.

SASKATCHEWAN

In Saskatchewan, employers are required to address signaling under the Occupational Health and Safety Regulations — Part 9 Safeguards, Storage, Warning Signs, and Signals, Sections 9-21 and possibly 9-22, Part 13 Hoists, Cranes, and Lifting Devices, Section 13-12, and Part 28 Forestry and Mill Operations, Sections 28-13(9) and 28-13(11)(c). These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and other personnel in high-risk environments such as construction sites, forestry operations, and industrial facilities.

Part 9 - Safeguards, Storage, Warning Signs, and Signals,

Sections 9-21 and possibly 9-22

Risk from Vehicular Traffic

- (1) An employer or contractor **shall** ensure that a worker who is at risk from vehicular traffic, whether on a public highway or at any other place of employment, is provided with and **required** to use a high visibility vest, armlets, or other high visibility clothing.
- (2) If there is a danger to a worker from vehicular traffic on a public highway, an employer or contractor **shall** develop and implement a traffic control plan, in writing, to protect the worker from traffic hazards by the use of 1 or more of the following:
 - (a) warning signs;
 - (b) barriers;
 - (c) lane control devices;
 - (d) flashing lights;
 - (e) flares;
 - (f) conspicuously identified pilot vehicles;
 - (g) automatic or remote-controlled traffic control
 systems;
 - (h) designated signalers directing traffic.
- (3) An employer or contractor **shall** ensure that:
 - (a) workers are trained in the traffic control plan developed pursuant to subsection (2); and
 - (b) the traffic control plan developed pursuant to subsection (2) is made readily available for reference by workers at the place of employment.
- (4) An employer or contractor **shall** use designated signalers to control traffic on a public highway only if other methods of traffic control are not adequate or suitable.
- (5) If designated signalers are used to control traffic on a public highway, an employer or contractor **shall** provide:

- (a) at least 1 designated signaler if:
 - (i) traffic approaches from 1 direction only; or
 - (ii) traffic approaches from both directions and the designated signaler and the operator of an approaching vehicle would be clearly visible to one another; and
- (b) at least 2 designated signalers if traffic approaches from both directions and the designated signaler and the operator of an approaching vehicle would not be clearly visible to one another.
- (6) If there is or may be a hazard to a worker from traffic at a place of employment other than a public highway, an employer or contractor **shall** develop and implement a traffic control plan to protect the worker from traffic hazards.
- (7) A traffic control plan required by subsection (6) must:
 - (a) be in writing;
 - (b) be made readily available for reference by workers at the place of employment; and
 - (c) set out, if appropriate:
 - (i) the maximum allowable speed of any vehicle or class of vehicles, including powered mobile equipment, in use at the place of employment;
 - (ii) the maximum operating grades;
 - (iii) the location and type of control signs;
 - (iv) the route to be taken by vehicles or powered mobile equipment; (v) the priority to be established for classes of vehicle;
 - (vi) the location and type of barriers or restricted areas; and (vii) the duties of workers and the employer or contractor.
- (8) A worker who operates a vehicle or unit of powered mobile equipment at a place of employment and who does not have a clear view of the path to be travelled **shall** not proceed until a person who has a clear view of the path to be travelled by

the vehicle or unit of powered mobile equipment signals to the worker that it is safe to proceed.

- (9) If a provision of this section conflicts with a provision of The Highways and Transportation Act, 1997, The Traffic Safety Act, a regulation made pursuant to any of those Acts or a bylaw of a municipality made pursuant to The Cities Act, The Municipalities Act or The Northern Municipalities Act, 2010, the provision of the other statute, regulation or bylaw prevails.
- (10) Nothing in this section applies to a peace officer in the performance of the peace officer's duties. Section 922(1) to (10).

For more information:

- Designated signalers. Section 9 21(1) to (7).
- Part 13 Hoists, Cranes, and Lifting Devices. Section 13-12.

Designated signaler. Section 13 12(1) to (4).

Part 28 Forestry and Mill Operations. Sections 28-13(9)
and 28-13(11)(c).

Further details on the Occupational Health and Safety Regulations can be found at <u>Saskatchewan.ca</u>.

YUKON

In Yukon, employers are required to address signaling under the Occupational Health and Safety Regulations — Part 1 General, Section 1.47, and Part 6 Mobile Equipment, Sections 6.07 to 6.10 and 6.38. These regulations mandate the use of proper signaling systems to ensure safe communication between workers, equipment operators, and other personnel in high-risk environments such as construction sites, material handling areas, and mobile equipment operations.

Part 1 - General, Section 1.47

Worker Protection on Public Way

- (1) Where a worker may be endangered by vehicular traffic on a project on a public way, or on a public way on a project, workers **shall** be protected by the following measures as are necessary:
 - (a) workers directing traffic,
 - (b) warning signs,
 - (c) solid barriers,
 - (d) lane control devices or traffic lights,
 - (e) flashing lights, strobe lights or flares,
 - (f) pilot car, or
 - (g) a combination of the above.

Instruction to Workers

(2) Workers who are **required** to direct traffic **shall** be given written and verbal instructions setting out the signals they are to use and the instructions they are to provide motorists.

Illumination of Traffic Control Station

(3) Workers **required** to direct traffic during hours of darkness **shall** be provided with lighting systems to illuminate the entire traffic control workstation, and additional retroreflective devices such as wristbands and leg bands. **Section 1.47(1) to (3).**

Warning Devices, Lights, Mirrors, and Windows — Part 6 Mobile Equipment

Warning Signal Device

If a mobile equipment operator cannot see immediately behind the machine, either directly or by the use of mirrors or other device, the machine **shall** have an automatic audible warning device that:

- (a) activates whenever the equipment controls are positioned to move the equipment in reverse, and is audible above the ambient noise level, or
- (b) where it is not practicable to provide such a warning device, a signal person **shall** be appointed to guide the operator and warn other workers, as **required** by section 6.38. **Section 6.07**.

Worker Uses Lights

Mobile equipment **shall** be equipped with lights that **shall** be used during the period from a half-hour before sunset to a half-hour before sunrise, or when persons, equipment or vehicles are not clearly discernible at a distance of 150 m (500 ft.), to adequately illuminate:

- (a) the direction of travel,
- (b) the working area about the mobile equipment, and
- (c) the cab instruments. Section 6.08.

Rear View Mirrors

Mobile equipment shall have:

- (a) a mirror or mirrors providing the operator with an undistorted reflected view to the rear of the equipment, or(b) parabolic mirrors in combination with flat mirrors if
- necessary to improve rear vision. Section 6.09.

Window Standards

- (1) Windows on mobile equipment **shall** be made of safety glazing meeting the requirements of ANSI Standard Z26.1, Safety Glazing Materials for Glazing Motor Vehicles and Motor Vehicle Equipment Operating on Land Highways, or other similar standards acceptable to the board.
- (2) Where the maximum travel speed of mobile equipment is 40 km/h (25 mph) or less, tempered windscreen glazing used on the front of the machine **shall** meet the requirements of:

- (a) ANSI Standard Z26.1, Safety Glazing Materials for Glazing Motor Vehicles and Motor Vehicle Equipment Operating on Land Highways, section 4, item 2, or (b) other similar standard acceptable to the board.
- (3) If wipers on the mobile equipment are used on plastic glazing, the glazing surface **shall** be hard coated.

Replacement Windows

- (4) Each original equipment or manufacturer's replacement window **shall** be marked to show the manufacturer's name or recognized identification mark, the standard to which the window conforms, and in the case of polycarbonate windows, the thickness and grade of material.
- (5) A custom-made replacement window for mobile equipment shall meet the requirement of subsections (1) to (3).

Clear Vision

(6) Windshields, side and rear windows, and rear-vision mirrors **shall** be maintained to provide clear vision for the mobile equipment operator. **Section 6.10(1) to (6).**

Further details on the Occupational Health and Safety Act can be found at wcb.YK.ca