



## **(v) Critical Standards**

## **Critical Safe Work Standards**

The Critical Work Standards provide the interpretation for some of the most common risks, implementing lessons learned and translating some of the key corporate expectations into common safety practices:

1. Safe Work Permits
2. Energy Isolation
3. Ground Disturbance
4. Confined Space Entry
5. Working at Heights
6. Lifting Operations
7. Personal Protective Equipment
8. Driving Safety
9. Management of Change

## 1. Safe Work Permits

Before conducting work that involves confined space entry, energized systems, ground disturbance greater than 30 cm., locations where buried hazards are known to exist, hot work or non-routine cold work, a permit must be obtained that:

- ✓ defines scope of work
- ✓ identifies hazards and assesses risk
- ✓ establishes control measures to eliminate or mitigate hazards
- ✓ links the work to other associated work permits or simultaneous operations
- ✓ is authorised by the responsible person(s)
- ✓ aids with the pre-job communication of applicable information to everyone involved with the work
- ✓ ensures adequate control over the return to normal operations

## 2. Energy Isolation

Any isolation of energy systems; mechanical, kinetic, electrical, process, hydraulic and others, cannot proceed unless:

- ✓ the method of isolation and discharge of stored energy are agreed and executed by a competent person(s)
- ✓ any stored energy is discharged
- ✓ a system of locks and tags is utilised at isolation points
- ✓ a test is conducted to ensure the isolation is effective
- ✓ minimum local regulatory requirements are met
- ✓ isolation effectiveness is periodically monitored

### 3. Ground Disturbance

Work that involves a man-made cut, cavity, trench or depression in the earth's surface formed by earth removal cannot proceed unless:

- ✓ a hazard assessment of the work site is completed by the competent person(s)
- ✓ all underground hazards, i.e., pipelines, electric cables, etc., have been identified, located and if necessary, isolated

Where persons are to enter an excavation:

- ✓ a confined space entry permit must be issued if the entry meets the confined space definition
- ✓ ground movement must be controlled and collapse is prevented by systematically shoring, sloping, benching, etc., as appropriate and in compliance with local regulatory requirements.
- ✓ ground and environmental conditions must be continuously monitored for change

### 4. Confined Space Entry

- Entry into any confined space cannot proceed unless:
  - ✓ all other options have been ruled out
  - ✓ permit is issued with authorisation by a responsible person(s)
  - ✓ permit is communicated to all affected personnel and posted, as required
  - ✓ all persons involved are competent to do the work
  - ✓ all sources of energy affecting the space have been isolated
  - ✓ testing of atmospheres is conducted, verified and repeated as often as defined by the risk assessment and/or specified on the safe work permit.
  - ✓ stand-by person is identified and stationed
  - ✓ unauthorised entry is prevented

## 5. Working at Heights

Working at heights of 2 metres (6 feet) or higher above the ground cannot proceed unless:

- ✓ a fixed platform is used with guard or hand rails, verified by a competent person(s) or ...
- ✓ fall arrest equipment is used that has:
  - an engineering approved anchor - mounted, preferably overhead
  - full body harness using double latch self locking snap hooks at each connection
  - synthetic fibre lanyards
  - shock absorber
- ✓ fall arrest equipment will limit free fall to maximum of 2 metres (6 feet) or compliance to local regulation.
- ✓ a visual inspection of the fall arrest equipment and system is completed and any equipment that is damaged or has been activated is taken out of service.
- ✓ person(s) are competent to perform the work

The Canadian Regulatory standard for working at heights is 3 metres and is the only exception to this standard.

## 6. Lifting Operations

Lifts utilizing cranes, hoists, or other mechanical lifting devices will not commence unless:

- ✓ an assessment of the lift has been completed and the lift method and equipment has been determined by a competent person(s)
- ✓ operators of powered lifting devices are trained and certified for that equipment
- ✓ rigging of the load is carried out by a competent person(s)
- ✓ lifting devices and equipment has been certified for use within a minimum of 12 months
- ✓ load does not exceed dynamic and/or static capacities of the lifting equipment
- ✓ any safety devices installed on lifting equipment are operational
- ✓ all lifting devices and equipment have been visually examined before each lift by a competent person(s)

## **7. Personal Protective Equipment**

No operation may commence until all persons involved are using the required Personal Protective Equipment (PPE) based on the following minimum criteria:

- ✓ compliance with the minimum applicable local standards
- ✓ applicable to the controls required by a site and job specific risk assessment and to the prevailing working conditions
- ✓ comfort and fit is compatible with the length of the time it needs to be worn, the need to see or hear and other PPE required.

PPE should be inspected prior to use in accordance with the manufacturer's recommendations to ensure that it is not defective:

- ✓ defective PPE should be discarded.
- ✓ equipment used by more than one person must be cleaned and disinfected before each usage.

## **8. Defensive Driving**

All categories of vehicle must not be operated unless:

- ✓ vehicle is fit for purpose, inspected and confirmed to be in safe working order
- ✓ passenger number does not exceed manufacturer's design specification for the vehicle
- ✓ loads are secure and do not exceed manufacturer's design specifications or legal limits for the vehicle
- ✓ seat belts are installed and worn by all occupants
- ✓ safety helmets are worn by riders and passengers of motorcycles, bicycles, all terrain vehicles, snow-mobiles and similar types of vehicle

Drivers must not operate a vehicle on company business or property unless:

- ✓ they are trained, certified and medically fit to operate the class of vehicle
- ✓ they are not under the influence of alcohol or drugs, and are not suffering from fatigue
- ✓ they use only hand-free cell phones and radios while driving.

## 9. Management of Change

Work arising from temporary and permanent changes, such as changes to system processes, procedures, equipment, products, materials and substances cannot proceed unless a Management of Change review is completed, where applicable, to include:

- ✓ a risk assessment conducted by knowledgeable representatives for all impacted by the change
- ✓ development of a work plan that clearly specifies the timescale for the change and any control measures to be implemented regarding:
  - equipment, facilities and process
  - operations, maintenance, inspection procedures
  - training, personnel and communication
  - documentation
- ✓ authorization of the work plan by the responsible person(s)