COMMON SAFETY ORIENTATION

PARTICIPANT MANUAL
VERSION 25.1

ENERGY SAFETY CANADA

Disclaimer

While every attempt has been made to ensure the accuracy and reliability of the contents of this publication, Energy Safety Canada disclaims any liability/responsibility for its accuracy or for the loss of damage howsoever occasioned resulting from the use of any of the information in this manual or for the violation of any regulation with which this information may conflict.

Copyright

ESC Corporate Profile

ENERGY INDUSTRY'S SAFETY ALLY

For over 75 years, Energy Safety Canada has been the national safety association for Canada's energy industry. Created by industry, for industry, we are dedicated to keeping energy workers safe and driving safety performance.

What We Do:

- Deliver industry-recognized training to meet industry needs.
- Collaborate with industry to drive continuous safety improvements.
- Provide safety and labour market data, insights and tools.
- Serve as the industry certifying partner for the Certificate of Recognition program.

Proudly Serving Our Industry

We are proud to work on behalf of Canada's energy industry associations.

Table of Contents

Introduction

This Common Safety Orientation (CSO) course provides workers new to the energy industry with foundational health and safety concepts to support safe work performance. Participants will learn about safe work practices, emergency preparedness and response procedures, reporting incidents and near misses, apply the 10 Life Saving Rules, and identify and address workplace hazards.

There are a total of 7 modules in this course and can take up to 4 hours to complete followed by an exam.

Course Outcomes

After completing this course, you will be able to:

- Explain your personal accountability for a safe work environment
- Describe what it means to arrive fit for duty
- Identify common hazards in the energy industry
- Explain the role of hazard assessment in mitigating hazards
- Describe the 10 Life Saving Rules and how they relate to workplace safety
- Describe the process and importance of reporting all incidents and near misses
- Explain the requirements of emergency preparedness and response procedures

Question:

What does working safely mean to you?

The following resources and actions support safe work.

Resources:

- Policies, procedures and standards
- Site-specific orientations
- 10 Life Saving Rules
- Energy Wheel
- Hierarchy of controls

Actions:

- Right to refuse unsafe work
- Stop work authority and workplace interventions
- Reporting outdated or incomplete policies, procedures and practices
- Accountability of the worker to know the OHS legislation

CHAPTER 1

STAYING SAFE: WHAT YOU NEED TO KNOW

Learning Objectives

After completing this module, you will be able to:

1. Identify your personal responsibilities in contributing to a safe work environment
2. Recognize key elements of Occupational Health and Safety (OHS) legislation
3. Describe how company policies can support safe decision making

Question:

What does Personal Accountability mean to you?

_____

_____

_____

Topics Covered

- Personal Accountability
- Safe actions
- Distractions
- OHS legislations
  - Right to refuse
  - Right to know
  - Right to participate
- Company policies
- Site-specific orientation information

Exercise

1. Select True or False.

   Assessing your surroundings, staying clear of moving equipment and following safety protocols are all things you can do to prevent a close call like Ryan's and stay out of the Line of Fire.

   ☐ True

   ☐ False

2. Which of the following can lead to unsafe actions? Select all that apply.

   a. Unfamiliar work environment

   b. Good habits have faded over time

   c. Being unfamiliar with the risks

3. Select all of your legal rights under Occupational Health and Safety (OHS) legislation:

   a. Right to Participate

   b. Right to Know

   c. Right to Refuse

   d. Right to Refuse Orientation Training

4. What should you do when you see a co-worker working on a piece of equipment, but it looks like they forgot to put on their hearing protection?

   a. Nothing – it's not your responsibility

   b. Let your co-worker finish the task but tell your supervisor

   c. Pause the work. Seek to understand and state your concern

5. Select True or False.

   In addition to Occupational Health and Safety legislation, your company may have specific policies, procedures and standards to support safe decision making on the worksite.

   ☐ True

   ☐ False

CHAPTER 2

A SAFE AND INCLUSIVE WORKPLACE

Learning Objectives

After completing this module, you will be able to:

1. Explain your responsibilities in helping to create a safe and inclusive workplace
2. Identify the legal requirements that support workplace safety and inclusion

Question:

Why must the worksite be a respectful environment?

Topics Covered

- Respect your co-workers in the workplace
- Violations of respectful workplace policies
- Reporting discrimination and harassment

Exercise

1. Which of the following do you think shows a "respectful work environment"?

   a. No bullying
   b. Respect for co-workers
   c. Everyone is treated equally
   d. Fighting and other acts of violence are not allowed
   e. No discrimination
   f. No harassment of any type
   g. Workers trust each other
   h. Everyone feels safe

2. Look at each behaviour below. Put a **"√"** if it creates respect at work, or an **"X"** if it doesn't.

   a. Threats
   b. Including a co-worker in social activities
   c. Helping a co-worker in any way you can
   d. Fighting
   e. Sexual jokes
   f. Treating everyone equally
   g. Mimicking a person's accent
   h. Teasing someone about their size or weight
   i. Standing up for someone who is being harassed
   j. Nicknames based on ethnicity
   k. Introducing a new person to co-workers
   l. Spreading gossip and rumours
   m. Reporting incidents of bullying
   n. Prompt and respectful conflict resolution

3. Which of the following actions at the workplace are against the law? Select all that apply

   a. Harassment
   b. Discrimination
   c. Violence

CHAPTER 3

WORKING SAFELY IN THE ENERGY SECTOR

Learning Objectives

After completing this module, you will be able to:

1. Identify common hazards in the energy sector
2. Recognize hazards that can lead to Serious Incidents and Fatalities (SIFs)
3. Explain the purpose of the Energy Wheel in supporting effective hazard identification

Question:

Why is it important for you to be able to identify hazards which are common to the energy industry?

Topics Covered

- Definitions of Hazards and Hazard Assessment
- Serious Incidents and Fatalities (SIFs)
- Linking Serious Incidents and Fatalities to Life Saving Rules
- Introduction to the Energy Wheel
- Hazardous energy sources
- Common hazards:
  - Confined space entry
  - Hazardous atmospheres
  - Hydrogen sulfide
  - Hazardous substances
  - Line of Fire
  - Lifting and hoisting
  - Height hazards
  - Ground disturbance
  - Fire and explosion
  - Equipment /Tools/Materials
  - Housekeeping
  - Other hazards (Severe weather, Noise, Wildlife, Poor ergonomic conditions)

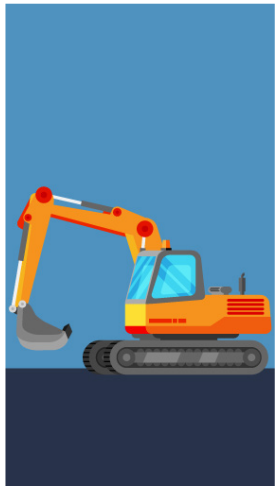
Exercise

1. Which ONE of the following hazards is most likely to cause a serious injury or death?

   a. Losing your footing in the mud

   b. Working around heavy/mobile equipment

   c. A sharp edge on a hand tool

   d. Icy steps leading into a building

2. What is the purpose of the Energy Wheel?

   a. To identify hazards from different energy sources that could cause harm if not properly controlled

   b. To apply the correct safety control measures

   c. To record and report worksite incidents

3. When working at height, what should you do to keep yourself and others safe? Select all that apply.

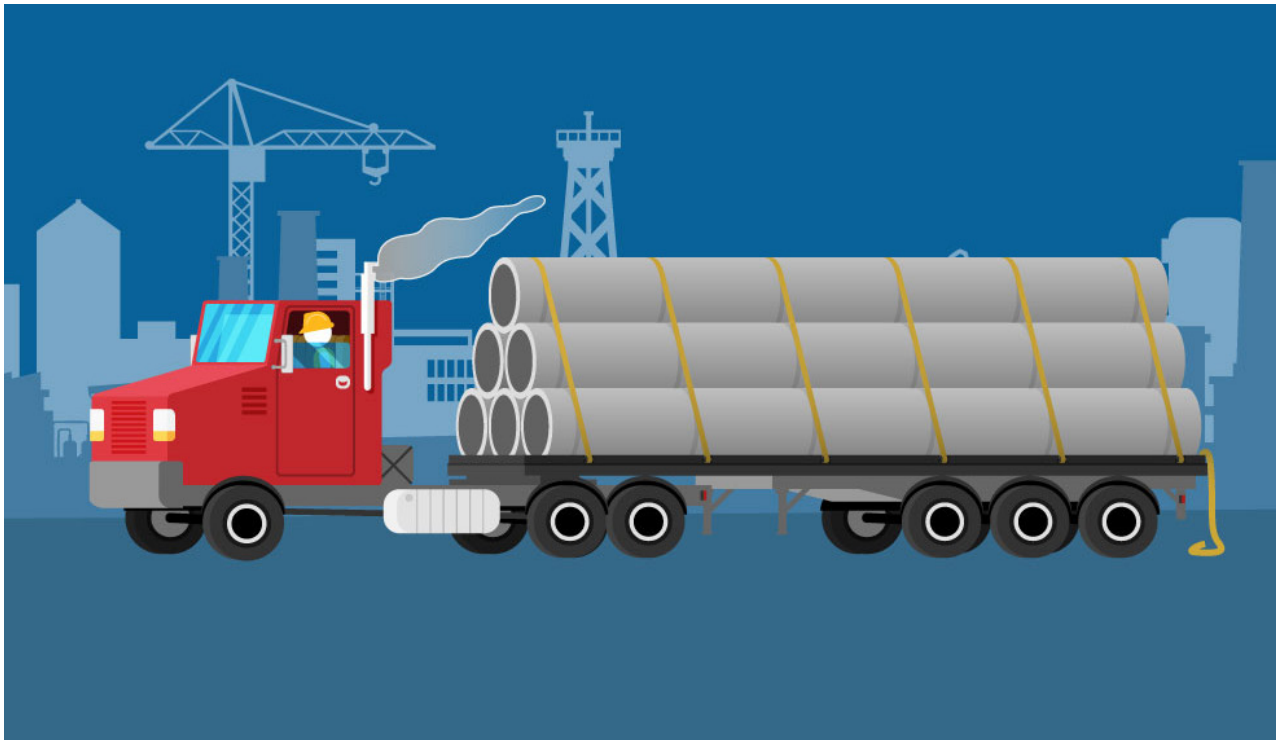
   a. Secure the workspace below

   b. Use tool tethers

   c. Use fall protection equipment

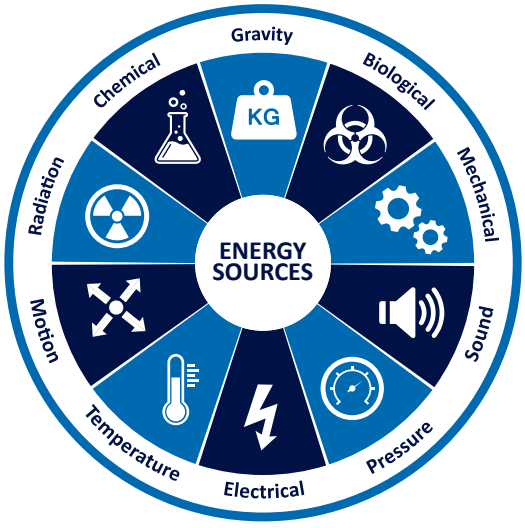
   d. Avoid carrying too many items at once

4. From the image below, spot the hazards and hazardous Energy Sources related to the truck.



NO.	HAZARD	ENERGY SOURCE
1		
2		
3		
4		
5		
6		

ENERGY WHEEL



ENERGY SOURCES

Gravity
Enables objects to fall, roofs to collapse and people to trip and fall.

Biological
Bacteria, viruses, fungi, parasites, insects, poisonous plants and animals.

Mechanical
Rotating equipment, drive belts, conveyors, motors or compressed sprints.

Sound
Equipment noise, vibration, high-pressure releases and the impact of noise to communication.

Pressure
Piping, vessels, tanks, hoses, compressed cylinders and pneumatic and hydraulic equipment.

Electrical
Power lines, transformers, generators, wiring, batteries, static charges and lightning.

Temperature
Ignition sources, hot or cold surfaces or materials, steam, friction and weather.

Motion
The movement of vehicles, equipment or materials, water, wind or a person's body or part of a body such as arm.

Radiation
Lighting issues, solar rays, welding arcs, microwaves, lasers, x-rays and NORM.

Chemical
Flammable vapours and gases, combustibles, pyrophorics, toxic compounds, corrosives, oxygen deficient atmospheres, welding fumes and dust.

CHAPTER 4

HAZARD ASSESSMENT

Learning Objectives

After completing this module, you will be able to:

1. Define a hazard assessment and identify when it is required
2. Describe the key steps in a hazard assessment process
3. Explain the importance of safety communications
4. Differentiate between different types of safety meetings and their purpose

Question:

How can you and others benefit from knowing how to identify the hazard, assess and control the risks?

Topics Covered

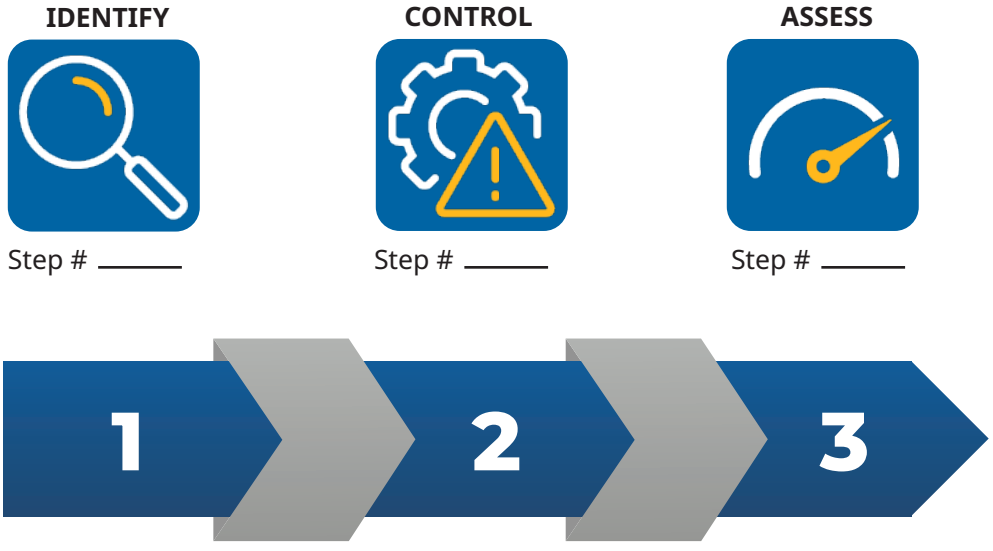
- Hazard assessment
- How to perform hazard assessment
  - Identify hazards
  - Assess risks
  - Control risks
- Use of Energy Wheel in hazard assessment
- Hierarchy of controls
  - Elimination
  - Substitution
  - Engineering controls
  - Administrative controls
  - Personal protective equipment
- Safety meetings
  - Daily safety meetings
  - Pre/post-shift handover meetings
  - Toolbox/tailgate meetings

Exercise

1. Which one of the following best describes a Hazard Assessment?

   a. A step-by step process used to identify hazards, assess and control risks in the workplace
   b. 10 rules developed by industry to support a safe working environment
   c. A document used to record and report incidents that have occurred on the worksite

2. List the steps of Hazard Assessment in the correct order.



3. Draw a line to match each type of safety meeting with their intended purpose.

Type of safety meeting	Main purpose
Daily safety meeting	• Reviewing any issues from the previous day
Pre/post-shift handover meeting	• Covers specific tasks that are unusual or out of the regular scope
Toolbox/tailgate meeting	• Sharing important information for a safe work handover

4. Spot the 7 hazards from the image below.

1.

2.

3.

4.

5.

6.

7.

5. For each of the identified hazards in Question #4, select the appropriate control:

   01. Apply a control: Which is the most effective way to control the hazard caused by the unsecured hammer on the scaffolding?

      a. Pick up the hammer and put it away
      b. Put a barrier around the area below the hammer
      c. Assume the person who used the hammer will put it away
      d. Wear a hard hat

   02. Apply a control: Which is the most effective way to control the hazard caused by the mechanical hoisting of materials?

      a. Have several spotters watching the lift
      b. Train workers to stay away from the load
      c. Wear a hard hat
      d. Use barriers to create an exclusion zone to keep people from walking underneath the load

   03. Apply a control: Which is the most effective way to control the hazard caused by the open container of hydrochloric acid?

      a. Smell the contents to check for fumes
      b. Immediately pick up the lid and put it on the container
      c. Pull the fire alarm
      d. Read the products Safety Data Sheet (SDS) to learn how to handle it safely

   04. Apply a control: Which is the most effective way to control the hazard caused by the light with a long extension cord?

      a. Let everyone know about the tripping hazard
      b. Replace the light with a cordless model
      c. Put up temporary barriers around the cord
      d. Discuss it at the next safety meeting

   05. Apply a control: Which is the most effective way to control the hazard while fixing the leaking high-pressure pipe?

      a. Stand to the side to avoid being hit by high pressure gas
      b. Ensure there is a hot work permit for the job
      c. Wear gloves and goggles
      d. Follow the correct energy isolation procedures

6. Select True or False.

   Safety communications are important to ensure everyone has the information needed to stay safe on the job.

   ☐ True
   ☐ False

CHAPTER 5

LIFE SAVING RULES

Learning Objectives

After completing this module, you will be able to:

1. Identify the 10 Life Saving Rules that support a safe work environment
2. Explain how the Life Saving Rules can help prevent serious incidents

Question:

What are some of the rules that you obey at the worksite that can be life saving?

Topics Covered

- 10 Life Saving Rules
  - Confined Space
  - Working at Height
  - Work Authorization
  - Energy Isolation
  - Line of Fire
  - Bypassing Safety Controls
  - Driving
  - Hot Work
  - Safe Mechanical Lifting
  - Fit for Duty

Exercise

1. Select True or False.

   The purpose of the Life Saving Rules is to help workers in the energy industry recognize and prevent Serious Incidents and Fatalities (SIFs) in the workplace.

   ☐ True

   ☐ False

2. Apply the appropriate Life Saving Rule for the scenarios which could have helped keep them safe

SCENARIO		LIFE SAVING RULE
When Ryan was hit by a suspended load		
When Morgan crouched low to secure a loose strap and ended up being in an accident		
When Kevin was in a hurry to complete his task quickly to join the soccer game for his daughter		

CHAPTER 6

REPORTING INCIDENTS AND NEAR MISSES

Chapter 6 - Reporting Incidents and Near Misses

Learning Objectives

After completing this module, you will be able to:

1. Differentiate between an incident and a near miss
2. Describe the reporting process and explain the importance of reporting all incidents and near misses

Question:

How does understanding incidents and near misses help you work more safely?

Topics Covered

- Incident and Near Miss – definitions and difference
- How to report incidents and near misses
- Responsibilities of workers in incident reporting
- Whistleblower program
- Incident investigation

Exercise

1. What should you do when you just witnessed a near miss?
   a. Tell your supervisor and follow company specific reporting process
   b. Nothing – A near miss is not an accident and does not need to be reported
   c. Do not report it, but try to remember the hazard and avoid it next time
2. Which of the following statements are true about an investigation? select all that apply
   a. Once you have reported an incident or near miss, it is someone else's responsibility
   b. You have a right to know what happened
   c. You must participate in the investigation as required by the investigator
   d. Investigations help to prevent future incidents

CHAPTER 7

EMERGENCY PREPAREDNESS AND RESPONSE

Learning Objectives

After completing this module, you will be able to:

1. Describe the purpose and components of an Emergency Response Plan
2. Identify key elements of an emergency response procedure
3. Explain your role in emergency preparedness and respond effectively in case of an emergency

Question:

Assume that you have an emergency at your home, list some of the key steps in performing this emergency.

Topics Covered

- Emergency Response Plan
  - Purpose and responding to emergencies
- Emergency response procedures
- Your role in Emergency Preparedness and Response

Exercise

1. Select True or False.

   The purpose of an emergency response plan is to avoid or reduce harm to people, property, equipment and environment.

   ☐ True

   ☐ False

2. What is the very first thing you should do in the event of an emergency?

   a. Immediately stop all work

   b. Check the emergency response procedures manual

   c. Finish what you are doing as quickly and safely as possible

   d. Check with your supervisor to make sure it is a real emergency

3. Select True or False.

   You should talk to your supervisor if you have NOT received any training or instruction on the Emergency Response Plan at your new job.

   ☐ True

   ☐ False

4. An emergency has been declared. As you are headed to the muster point, you see that a co-worker is still working. What should you do?

   a. Nothing – you are not responsible for your co-worker

   b. Seek to understand and state your concern

   c. Assume they already know what to do and keep going

5. What can you do to ensure that you are always prepared to respond in an emergency? Select all that apply.

   a. Participate fully in drills and practices

   b. Review your site Emergency response plan

   c. If you don't know something, ask

   d. Know the location of your muster point

APPENDIX

ANSWER KEY

Appendix - Answer Key

CHAPTER 1 - STAYING SAFE: WHAT YOU NEED TO KNOW

1. True
2. a, b, c
3. a, b, c
4. c
5. True

CHAPTER 2 - A SAFE AND INCLUSIVE WORKPLACE

1. a, b, c, d, e, f, g, h
2. Respectful Work Environment:
   b, c, f, i, k, m, n
   Not a Respectful Work Environment:
   a, d, e, g, h, j, l
3. a, b, c

CHAPTER 3 - WORKING SAFELY IN THE ENERGY SECTOR

1. b
2. a
3. a, b, c, d
4.

NO.	HAZARD	ENERGY SOURCE
1	Pipes strapped	Gravity & Motion
2	Wheels of the truck	Motion & Pressure
3	Fuel tank	Chemical
4	Vehicle exhaust fumes	Chemical
5	Engine of vehicle	Sound
6	Exhaust pipe	Temperature

CHAPTER 4 - HAZARD ASSESSMENT

1. a

2. Identify > Assess > Control

3. Type of safety meeting — Main purpose

Type of safety meeting	Main purpose
Daily Safety Meeting	Reviewing any issues from the previous day
Pre/Post-Shift Handover Meeting	Sharing important information for a safe work handover
Toolbox/Tailgate Meeting	Covers specific tasks that are unusual or out of the regular scope

4. Suspended load
   Truck
   Cracked pipe
   Chemical drum
   Ladder
   Unsecured hammer
   Extention cord

5. 01. a
   02. d
   03. d
   04. b
   05. d

6. True

CHAPTER 5 - LIFE SAVING RULES

1. True

2. * = Based on where you work, these LSR's may also apply

SCENARIO	LIFE SAVING RULE
When Ryan was hit by a suspended load	Safe Mechanical Lifting Line of Fire Fit for Duty* Work Authorization* Bypassing Safety Controls*
When Morgan crouched low to secure a loose strap and ended up being in an accident	Line of Fire Driving*
When Kevin was in a hurry to complete his task quickly to join the soccer game for his daughter	Working at Height Fit for Duty*

Appendix - Answer Key

CHAPTER 6 - REPORTING INCIDENTS AND NEAR MISSES

1. a
2. b, c, d

CHAPTER 7 - EMERGENCY PREPAREDNESS AND RESPONSE

1. True
2. a
3. True
4. b
5. a, b, c, d

Life Saving Rules

Confined Space

Obtain authorization before entering a confined space

- I confirm energy sources are isolated
- I confirm the atmosphere has been tested and is monitored
- I check and use my breathing apparatus when required
- I confirm there is an attendant standing by
- I confirm a rescue plan is in place
- I obtain authorization to enter

Working at Height

Protect yourself against a fall when working at height

- I inspect my fall protection equipment
- I secure tools and work materials to prevent dropped objects
- I tie off 100% to approved anchor points while outside a protected area

Work Authorization

Work with a valid permit when required

- I have confirmed if a permit is required
- I am authorized to perform the work
- I understand the permit
- I have confirmed that hazards are controlled and it is safe to start
- I stop and reassess if conditions change

Energy Isolation

Verify isolation and zero energy before work begins

- I have identified all energy sources
- I confirm that hazardous energy sources have been isolated, locked, and tagged
- I have checked there is zero energy and tested for residual or stored energy

Line of Fire

Keep yourself and others out of the line of fire

- I position myself to avoid:
  - Moving objects
  - Vehicles
  - Pressure releases
  - Dropped objects
- I establish and obey barriers and exclusion zones
- I take action to secure loose objects and report potential dropped objects

Bypassing Safety Controls

Obtain authorization before overriding or disabling safety controls

- I understand and use safety-critical equipment and procedures which apply to my task
- I obtain authorization before:
  - Disabling or overriding safety equipment
  - Deviating from procedures
  - Crossing a barrier

Driving

Follow safe driving rules

- I always wear a seatbelt
- I do not exceed the speed limit, and reduce my speed for road conditions
- I do not use phones or operate devices while driving
- I am fit, rested and fully alert while driving
- I follow journey management requirements

Hot Work

Control flammables and ignition sources

- I identify and control ignition sources
- Before starting any hot work:
  - I confirm flammable material has been removed or isolated
  - I obtain authorization
- Before starting hot work in a hazardous area I confirm:
  - A gas test has been completed
  - Gas will be monitored continually

Safe Mechanical Lifting

Plan lifting operations and control the area

- I confirm that the equipment and load have been inspected and are fit for purpose
- I only operate equipment that I am qualified to use
- I establish and obey barriers and exclusion zones
- I never walk under a suspended load

Fit for Duty

Be in a state to perform work safely

- I will be physically and mentally in a state to perform my assigned duties
- I commit to not being under the influence of alcohol or drugs
- I will inform a supervisor immediately if I or a co-worker may be unfit for work

ENERGY SAFETY CANADA

CustomerService@EnergySafetyCanada.com
1 800 667 5557

EnergySafetyCanada.com