Compliance Review

eSafetyFirst Canada

Online Fire Safety & Extinguishers Course

The purpose of this document is to outline the compliance review for the eSafetyFirst Canada (eSafetyFirst) online Fire Safety & Extinguishers course. The course was viewed in its entirety and then reviewed chapter by chapter to verify the content met the required learning outcomes for compliance.

When evaluating an online **Fire Safety & Extinguishers Training** course, the learning outcomes must balance baseline worker awareness, practical emergency response skills, and compliance with statutory requirements.

In Canada, workplace fire safety is governed by a framework of overlapping federal, provincial, and municipal authorities:

- **Statutory Authority:** The ***National Fire Code of Canada 2020 and the National Building Code of Canada 2020*** mandate building owner/employer compliance, establishes enforcement powers, and enforces municipal adoption of the Fire Code.
- **Building & Operational Standards:** The **National Fire Code of Canada (NFC)** and provincial counterparts (e.g., *Ontario Fire Code*, *BC Fire Code*) set mandatory requirements for portable fire extinguisher maintenance (aligned with **NFPA 10**), fire hazard controls, and building Fire Safety Plans.
- **Occupational Health & Safety Laws:** Provincial **OH&S Acts and Regulations** (e.g., Ontario OHSA, WorkSafeBC, Alberta OHS) require employers to inform workers about workplace hazards, provide appropriate protective equipment/supplies, and train employees on emergency procedures.

The online course covers the necessary theory for fire safety and fire extinguisher awareness; there are no practical components. The eSafetyFirst course also provides a robust supplementary information article regarding fire safety and fire extinguisher training, it can be found here, https://esafetyfirst.com/blog/fire-and-extinguisher-safety-prevention-and-protection/. The course and the supplementary material provide the learner with the information the ensure sufficient fire safety and fire extinguisher awareness. The course confirms theory component understanding using quizzes.

The expected learning outcomes below are organized directly under the course's module structure. Any required revisions or suggestions for improvement will be listed at the end of each module:

All corrective actions are noted in **BOLD RED** font.

1. Introduction to Fire Safety

This foundational module focuses on the science of fire, understanding how fires develop and spread, and recognizing the basic characteristics required to prevent workplace fire loss.

Expected Learning Outcomes

To meet compliance, once completing this section, the learner should be able to:

- **Explain the Chemistry of Fire:** Describe the "Fire Triangle" (Heat, Fuel, Oxygen) and the "Fire Tetrahedron" (adding the uninhibited chemical chain reaction) to explain how fires start, sustain, and are extinguished.
- **Classify Types of Fires:** Differentiate between the five standard classes of fire according to NFPA/Fire Code standards:
    - **Class A:** Ordinary combustibles (wood, paper, trash)
    - **Class B:** Flammable liquids and gases (gasoline, solvents, propane)
    - **Class C:** Energized electrical equipment (appliances, wiring, motors)
    - **Class D:** Combustible metals (magnesium, titanium, sodium)
    - **Class K:** Commercial cooking media (vegetable oils, animal fats)
- **Understand Fire Behavior and Propagation:** Identify the stages of fire development and methods of heat transfer (conduction, convection, radiation) that cause rapid fire spread.
- **Recognize Legal Duties & Rights:** Understand employer and worker duties under provincial OH&S legislation and the *Fire Protection and Prevention Act* regarding workplace fire safety.

This module more than meets compliance it also covers the following:

- An overview of firefighting methods
- It provides a matrix on the different extinguisher types, outlining the expected results and possible reactions that could occur
- Discusses common causes of fires and the different fuels.

- Provides and overview of the NFPA and CSA and explains their role in fire safety and prevention

2. Fire Risk Management

This module focuses on proactive hazard identification, storage compliance, routine inspections, and the key components of an employer's workplace Fire Prevention Program.

Expected Learning Outcomes

To achieve compliance, upon completion of this module the learner should be able to:

- **Identify Common Workplace Fire Hazards:** Inspect work environments for major fire risks, such as electrical overloading/faulty wiring, poor housekeeping (combustible waste accumulation), blocked exit routes, and improper handling of hot work tasks.
- **Apply Storage Controls for Flammable/Combustible Materials:** Explain safe storage, handling, and disposal methods for hazardous materials according to the National Fire Code and WHMIS/GHS regulations (e.g., using approved safety cans, grounding/bonding containers, and fire-rated storage cabinets).
- **Understand Fire Separation & Means of Egress:** Recognize the critical safety function of fire-rated doors, smoke barriers, and unblocked emergency exit routes—including the strict legal prohibition against wedging fire doors open or cluttering exit corridors. **This is addressed in Relevant Activities in Module 2 and further in Module 3 under Fire Protection**
- **Summarize Fire Prevention Program Components:** Outline the essential elements of an effective fire prevention plan, including routine hazard inspections, equipment maintenance (alarms, sprinklers, extinguishers), and employee awareness training.

This module meets compliance by covering all of the above requirements but also takes an additional step and covers construction site fire safety and risk management.

Two points to note on office fire safety:

1. ~~It would be an idea on future revisions to include a slide about portable heaters under desks. They often overload circuits and cause fires just be being a heat source near combustible materials.~~ **This point has been added to the slide to correct the issue.**
2. ~~The module talks about overloading circuits but it should also mention daisy chaining (plugging one into another) power bars. This is a rapidly growing source of fire related incidents in office spaces.~~ **A slide addressing and correcting this issue was added.**

3. Emergency Procedures for Responding to a Fire

This module focuses on operational readiness, emergency action plans, safe decision-making during an active fire, and the practical selection and operation of portable fire extinguishers.

Expected Learning Outcomes

Upon completing this section, the learner will be able to:

- **Navigate a Workplace Fire Safety Plan:** Describe standard workplace emergency procedures, including recognizing fire alarm signals, knowing primary/secondary evacuation routes, designated assembly areas, and accounting for personnel.
- **Execute Immediate Emergency Response Protocols:** Perform proper initial actions upon discovering a fire—often structured under the **R.A.C.E.** protocol:
    - **R**escue/Remove anyone in immediate danger.
    - **A**larm (activate the nearest manual pull station and call 911).
    - **C**ontain the fire (close doors behind you).
    - **E**xtinguish or Evacuate.

  The course does not use this acronym but this does not negatively effect the outcomes or compliance. It might be a good idea to adopt it for future revisions.
- **Assess When to Fight or Evacuate (Fight-or-Flight Decision):** Evaluate whether an incipient (small, early-stage) fire can be safely fought using a portable extinguisher based on size, smoke level, availability of a clear escape path, and proper training.
- **Select the Correct Portable Fire Extinguisher:** Match the correct extinguisher type (Water/APW, CO_2, Dry Chemical, Wet Chemical, Class D) to the specific class of fire to prevent disastrous reactions (e.g., avoiding Class A water extinguishers on Class C electrical or Class B liquid fires).
- **Apply the P.A.S.S. Operating Technique:** Demonstrate step-by-step knowledge of operating a portable fire extinguisher using the **P.A.S.S.** method:
    - **P**ull the safety pin.
    - **A**im the nozzle or hose at the base of the fire (not the flames).
    - **S**queeze the operating handle/trigger to discharge the agent.
    - **S**weep side-to-side across the base of the fire until extinguished.

- **Maintain Post-Extinguishment Safety:** Explain immediate post-extinguishment steps, including backing away safely without turning one's back on the fire area, monitoring for re-ignition, evacuating if the attempt fails, and reporting discharged extinguishers for immediate servicing.
- **Identify Extinguisher Inspection Requirements:** Recall basic visual inspection guidelines for portable fire extinguishers (e.g., checking pressure gauge in green zone, intact safety seal, mounted accessibility, and monthly inspection tags as per NFPA 10 / Fire Code standards).

This module meets compliance by covering all of the material noted above. It also covers the following:

- Inclusion of memos of the updated Fire Code.
- Evacuation of employees with disabilities
- Inclusion of single and dual stage alarms along with audible examples
- High rise buildings and crossover floors.

There are some points to note:

- ~~Slide 31, the fire extinguisher sign is in Spanish. Ideally it would only need to be bilingual if in a federal building or French in Quebec.~~ **A revised image was added to correct this**
- ~~The usual end slide occurs at slide 53 but there are 5 more slides left.~~ **Corrected**

Overall the course meets compliance with the applicable OHS Legislation and fire safety Acts and standards. There are 4 minor changes that should be addressed in the next revision.



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