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## PART 6 – LEGAL BASIS FOR FIRE SAFETY PLANNING

### 6.1] GENERAL

*The 2012 BC Fire Code, Division C, Part 2 (Administrative Provisions), Sentence 2.2.1.1 (1) states “Unless otherwise specified, the **owner or the owner’s authorized agent** shall be responsible for carrying out the provisions of this code.*

One such provision is the preparation, implementation and maintenance of a Fire Safety Plan (FSP) when required by the BC Fire Code.

Our building and property is required to have a Fire Safety Plan in conformance with the 2012<sup>1</sup> BC Fire Code Division B, Article 2.8.1.1. It has been prepared to meet the requirements of Subsection 2.8.2 and any other applicable fire safety plan requirements due to our specific operation.

Our FSP must meet all of the requirements of the applicable sections in the *BC Fire Code*. We have vested interest in promoting fire safety. In return for resources used to develop a FSP, our incidence and impact of fire will be reduced. The FSP is crucial for worker and public safety; it is much more than a template document produced just to meet a regulatory requirement. To that end, fire officials recommended we use experienced and trained employees, contractors or other individuals who are familiar with the content and design of FSPs.

Our Fire Safety Director with intimate knowledge of the workings and hazards associated with our facility or operation was involved to ensure specific issues related to our business were addressed. In addition, a fire safety plan consultant was consulted to assist with development of the plan or portions of the plan. Finally, communications with the local fire department occurred to help ensure congruency with their expectations and operations, as well as providing them knowledge of our facility.

The completed FSP was reviewed by the local fire department. A copy is retained on site in a location accepted by our local fire department. We are responsible for implementing all aspects of our FSP, for keeping it current and applicable at all times, and for ensuring our employees are well trained in its expectations.

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<sup>1</sup> These guidelines may need to be revised when the BC Fire Code is revised, typically every six years following the revision to the Canadian National Fire Code.

## **6.2] EXCERPTS FROM 2012 BC FIRE CODE – PART 2 BUILDING AND OCCUPANT FIRE SAFETY**

### *SECTION 2.8. – EMERGENCY PLANNING*

#### 2.8.1.1. Application:

- 1) Fire emergency procedures conforming to this Section shall be provided for
  - a) every building containing an assembly, care, treatment or detention occupancy,
  - b) every building required by the B.C. Building Code to have a fire alarm system,
  - c) demolition and construction sites regulated under Section 5.6.,
  - d) storage areas required to have a fire safety plan in conformance with Article 3.2.2.5. and 3.3.2.9.,
  - e) areas where flammable liquids or combustible liquids are stored or handled, in conformance with Article 4.1.5.5., and
  - f) areas where hazardous processes or operations occur, in conformance with Article 5.1.5.1

#### 2.8.1.2 Training of Supervisory Staff

- 1) Supervisory staff shall be trained in the fire emergency procedures described in the fire safety plan before they are given any responsibility for fire safety. (See Appendix A.)

#### 2.8.1.3 Keys and Special Devices

- 1) Any keys or special devices needed to operate the fire alarm system or provide access to any fire protection systems or equipment shall be readily available to on-duty supervisory staff.

### *SUBSECTION 2.8.2. – FIRE SAFETY PLAN*

#### 2.8.2.1 Measures in a Fire Safety Plan

- 1) In buildings or areas described in Article 2.8.1.1., a fire safety plan conforming to this Section shall be prepared in cooperation with the

fire department and other applicable regulatory authorities and shall include

- a) the emergency procedures to be used in case of fire, including
    - i) sounding the fire alarm (see Appendix A),
    - ii) notifying the fire department,
    - iii) instructing occupants on procedures to be followed when the fire alarm sounds,
    - iv) evacuating occupants, including special provisions for persons requiring assistance (see Appendix A),
    - v) confining, controlling and extinguishing the fire,
  - b) the appointment and organization of designated supervisory staff to carry out fire safety duties,
  - c) the training of supervisory staff and other occupants in their responsibilities for fire safety,
  - d) documents, including diagrams, showing the type, location and operation of the building fire emergency systems
  - e) the holding of fire drills,
  - f) the control of fire hazards in the building,
  - g) the inspection and maintenance of building facilities provided for the safety of occupants.
- 2) The fire safety plan shall be reviewed at intervals no greater than 12 months to ensure that it takes account of changes in the use and other characteristics of the building.

#### 2.8.2.5 Retention of Fire Safety Plans

- 1) The fire safety plan shall be kept in the building for reference by the fire department, supervisory staff and other personnel.
- 2) The fire safety plan for a building within the scope of Subsection 3.2.6 of the Division B of the BC Building Code shall be kept at the central alarm and control facility.

#### 2.8.2.6 Distribution

- 1) A copy of the fire emergency procedures and other duties for supervisory staff, as laid down in the fire safety plan, shall be given to all supervisory staff.

#### 2.8.2.7 Posting of Fire Emergency Procedures

- 1) At least one copy of the fire emergency procedures shall be prominently posted on each floor area.
- 2) In every hotel and motel bedroom, the fire safety rules for occupants shall be posted showing the locations of exits and the paths of travel to exits.
- 3) Where a fire alarm system has been installed with no provisions to transmit a signal to the fire department, a sign shall be posted at each manually actuated signaling box requesting that the fire department be notified, and including the telephone number of that department.
- 4) All buildings served by one or more elevators shall have, at each elevator entrance on each floor level, a permanently mounted fire safety sign or symbol indicating that the elevator is not to be used in case of fire.
- 5) The sign or symbol required by sentence 2.8.2.7(4) shall be at least 100 mm in height and width and shall be designed in accordance with NFPA 170 "Standard for Fire Safety and Emergency Symbols."

### *SUBSECTION 2.8.3 – FIRE DRILLS*

#### 2.8.3.1 Fire Drill Procedures

- 1) The procedure for conducting fire drills shall be determined by the person in responsible charge of the building, taking into consideration
  - a. the building occupancy and its fire hazards,
  - b. the safety features provided in the building,
  - c. the desirable degree of participation of occupants other than supervisory staff,
  - d. the number and degree of experience of participating supervisory staff,

- e. the features of fire emergency systems installed in buildings within the scope of Subsection 3.2.6 of Division B of the B.C. Building Code, and
- f. the requirements of the fire department.

### 2.8.3.2 Fire Drill Frequency

- 1) Fire drills as described in Sentence 2.8.3.1.(1) shall be held at intervals not greater than 12 months for the supervisory staff, except that
  - a. in day-care centres and in Group B major occupancies, such drills shall be held at intervals not greater than one month,
  - b. in schools attended by children, total evacuation fire drills shall be held at least 3 times in each of the fall and spring school terms, and
  - c. in buildings within the scope of Subsection 3.2.6. of Division B of the B.C. Building Code, such drills shall be held at intervals not greater than two months.

## **6.3] EXCERPTS FROM 2012 BC FIRE CODE –PART 3 INDOOR AND OUTDOOR STORAGE**

### *SUBSECTION 3.1.2. – DANGEROUS GOODS*

#### 3.1.2.6 Fire Safety Plan

- 1) In addition to the information required in Section 2.8, where dangerous goods are stored or handled, the fire safety plan shall include the names, addresses and telephone numbers of persons to be contacted in case of fire during non-operating hours.
- 2) When the dangerous goods referred to in Sentence (1) consist of Class 7 radioactive materials the fire safety plan shall also include
  - a) methods to control a fire emergency and to recover radioactive materials and equipment containing radioactive materials safely and efficiently,
  - b) the names, addresses, and telephone numbers of primary and alternative sources of expert radiation safety advice and assistance, and

- c) the location of primary and alternative sources of radiation survey instruments.

*SUBSECTION 3.2.2. – INDOOR STORAGE - GENERAL*

3.2.2.5. Fire Safety Plan

- 1) A fire safety plan conforming to Section 2.8 and Sentences (2), (3) and (5) shall be prepared.
- 2) The fire safety plan shall identify
  - a) the product classifications, as described in Sentence 3.2.1.1.(1), for each part of the building where products of different classification are stored.
  - b) the method of storage, including aisle widths for rack storage.
  - c) the maximum permitted height of storage for the building or part of the building, if different,
  - d) the maximum permitted size of individual storage areas, and
- 3) The storage method and maximum height of storage as described in Clauses (2)(b) and (c) shall be posted in the storage area.
- 4) Signs required in Sentence (3) shall have
  - a) a minimum dimension of 200mm, and
  - b) letters not less than 25mm high.
- 5) When the products stored include Group A plastics, rubber products, Level 2 or 3 aerosols, or dangerous goods, the fire safety plan shall identify the location and maximum quantity of product that is being stored.

*SUBSECTION 3.2.7. – INDOOR STORAGE OF DANGEROUS GOODS*

3.2.7.14. Placards

- 1) Individual storage areas used for the storage of dangerous goods shall be clearly designated as such by posted placards conforming to TC SOR/2008-34, "Transportation of Dangerous Goods Regulations," and Sentences (2) to (4).

- 5) Individual storage areas described in Sentence (1) shall be identified in the fire safety plan as required in Article 3.2.2.5.

*SUBSECTION 3.3.2. – OUTDOOR STORAGE - GENERAL*

3.3.2.9. Fire Safety Plan

- 1) A fire safety plan conforming to Section 2.8 and Sentences (2) and (3) shall be prepared.
- 2) The fire safety plan required in Sentence (1) shall identify
  - a) the location and classification of the products currently stored as described in Sentence 3.3.1.1.(1),
  - b) the method of storage, including the clear spaces required and the maximum permitted size of individual storage areas
  - c) the location of fire alarm systems and firefighting equipment, and
  - d) the control of fire hazards in and around the outdoor storage area.
- 3) At least one copy of the fire emergency procedures shall be prominently posted at the outdoor storage site.

**6.4] EXCERPTS FROM 2012 BC FIRE CODE –PART 4 FLAMMABLE AND COMBUSTIBLE LIQUIDS**

*SUBSECTION 4.1.5. – FIRE PREVENTION AND PROTECTION*

4.1.5.5. Emergency Planning

- 1) Except as provided in Sentence (2), emergency planning measures conforming to Section 2.8 shall be provided for all buildings, parts of buildings, and open areas described in Article 4.1.1.1. (storage, handling, use and processing of flammable and combustible liquids)
- 2) The fire safety plan required as part of the emergency planning measures in Sentence (1) shall be retained on site for reference by the authority having jurisdiction and personnel.



*SUBSECTION 4.1.6. – SPILL CONTROL AND DRAINAGE SYSTEMS*

4.1.6.1. Spill Control

- 4) The fire safety plan required by Article 4.1.5.5. shall include measures to be taken to direct the overflow of spilled liquids and firefighting water away from
  - a) buildings,
  - b) adjoining properties,
  - c) means of egress,
  - d) air intakes or openings that could permit vapour entry into the building,
  - e) fire alarm control panels,
  - f) fire department access routes,
  - g) valves controlling the water supply for firefighting , or fire protection systems,
  - h) fire department pumper connections or wall hydrants,
  - i) isolation valves controlling processes, and
  - j) valves controlling the flow of flammable liquids or combustible liquids

**6.5] EXCERPTS FROM 2012 BC FIRE CODE –PART 5 HAZARDOUS PROCESSES AND OPERATIONS**

*SUBSECTION 5.1.5. – FIRE SAFETY PLAN*

5.1.5.1. Fire Safety Plan

- 1) Except as provided in Sentences (2) and (3), a fire safety plan conforming to Section 2.8. shall be prepared for areas where processes and operations described in Article 5.1.1.1. take place. (processes and operations that involve a risk from explosion, high flammability or related conditions that create a hazard to life safety)
- 2) In addition to the information required in Section 2.8., the fire safety plan shall include

- a) the location and identification of storage and use areas for specific products, in conformance with Article 3.2.2.5., and
  - b) the names, addresses and telephone numbers of persons to be contacted in case of fire during non-operating hours.
- 3) In addition to the information required in Sentence (2), where Class 7 radioactive materials are used or handled, the fire safety plan shall include the information in Subsection 3.1.2.

*SUBSECTION 5.2.3. – PREVENTION OF FIRES*

5.2.3.7. Fire Safety Plan

- 1) In buildings or areas described in Article 2.8.1.1., the required fire safety plan shall include the safety measures described in this Subsection for the safe conducting of hot works.

*SECTION 5.5. – LABORATORIES*

5.5.3.1. Emergency Planning

- 1) Except as provided in Sentences (2) to (6), a laboratory shall conform to the requirements for emergency planning in Section 2.8. and for a fire safety plan in Subsection 5.1.5.
- 2) Fire drills required in Subsection 2.8.3. shall be held at intervals not greater than 3 months in a laboratory.

*SECTION 5.6. – CONSTRUCTION AND DEMOLITION SITES*

5.6.1.3. Fire Safety Plan

- 1) Except as required in Sentence (2), prior to the commencement of construction, alteration, or demolition operations, a fire safety plan shall be prepared for the site and shall include
  - a) the designation and organization of site personnel to carry out fire safety duties, including a fire watch service if applicable,
  - b) the emergency procedures to be followed in the event of a fire, including
    - i) initiating a fire warning,
    - ii) notifying the fire department

- iii) instructing site personnel on the procedures to be followed once the warning has been initiated, and
  - iv) confining, controlling and extinguishing the fire,
  - c) measures for controlling fire hazards in and around the building, and
  - d) a maintenance procedure for firefighting measures required in Section 5.6
- 2) Where construction, alteration or demolition operations occur in an existing building that is required to have a fire safety plan conforming to Section 2.8., the fire safety plan shall take into account the changes occurring to the building.

## **6.6] EXCERPT FROM WORKSAFE BC REGULATION – EMERGENCY PREPAREDNESS AND RESPONSE**

### **4.13 RISK ASSESSMENT**

- (1) The employer must conduct a risk assessment in any workplace in which a need to rescue or evacuate workers may arise.
- (2) If the risk assessment required by subsection (1) shows a need for evacuation or rescue, appropriate written procedures must be developed and implemented, and a worker assigned to coordinate their implementation.
- (3) Written rescue and evacuation procedures are required for but not limited to
  - (a) work at high angles,
  - (b) work in confined spaces or where there is a risk of entrapment,
  - (c) work with hazardous substances,
  - (d) underground work,
  - (e) work on or over water, and
  - (f) workplaces where there are persons who require physical assistance to be moved.

#### *4.14 EMERGENCY PROCEDURES*

- (1) Emergency means of escape must be provided from any work area in which the malfunctioning of equipment or a work process could create an immediate danger to workers and the regular means of exit could become dangerous or unusable.
- (2) Emergency exit routes must be designed and marked to provide quick and unimpeded exit.
- (3) At least once each year emergency drills must be held to ensure awareness and effectiveness of emergency exit routes and procedures, and a record of the drills must be kept.

#### *4.16 TRAINING*

- (1) All workers must be given adequate instruction in the fire prevention and emergency evacuation procedures applicable to their workplace.
- (2) Workers assigned to firefighting duties in their workplace must be given adequate training, by a qualified instructor, in fire suppression methods, fire prevention, emergency procedures, organization and chain of command, firefighting crew safety and communications applicable to their workplace.
- (3) Retraining for firefighting duties must be provided periodically, but not less than once a year.
- (4) A worker not covered by Part 31 (Firefighting), who is assigned to firefighting duties, must be physically capable of performing the assigned duties safely and effectively before being permitted to do them.

#### *4.17 NOTIFICATION OF FIRE DEPARTMENTS*

- (1) An employer having at a workplace hazardous products covered by WHMIS, explosives, pesticides, radioactive material, consumer products or hazardous wastes in quantities which may endanger firefighters, must ensure the local fire department is notified of the nature and location of the hazardous materials or substances and methods to be used in their safe handling.