

**DISTRICT OF HIGHLANDS  
MEMORANDUM**

**DATE:** FEBRUARY 15 , 2010                      File: 3900-2645

**TO:**                      MAYOR AND COUNCIL

**FROM:**                C. D. COATES, CAO

**RE:**                      EMERGENCY SERVICES BYLAW NO. 264

---

**BACKGROUND**

The attached Bylaw was given two readings in June 2005 and forwarded for a legal review from the District's legal counsel, A number of circumstances resulted in the bylaw not coming forward sooner. However, the reviews, and resultant modifications have been undertaken and the Bylaw is considered ready to proceed. Both the 2006 Vokes Report and 2009 MacAulay Report note the importance of enacting this Bylaw.

**DISCUSSION**

This is a complex Bylaw that establishes the operating authority and structure for the Fire Department. Additional organizational aspects of the bylaw are required and will be brought forward as an amendment to the Bylaw once the issues are sorted through.

The Bylaw also contains the important, and required element, of policy pertaining to Fire and Life Safety Inspections. The commencement of this program is imminent.

**STAFF RECOMMENDATION**

It is recommended that Council give third reading to Bylaw 264 as amended.

Respectfully Submitted



Christopher D. Coates  
Chief Administrative Officer

Attach.



## THE DISTRICT OF HIGHLANDS

### BYLAW NO. 264

A Bylaw to Regulate Emergency Services within the District of Highlands, Including the Prevention and Extinguishment of Fires and For the Preservation of Life and Property in Emergency Situations.

---

The Municipal Council of the District of Highlands in open meeting assembled enacts as follows:

#### **PART I – INTERPRETATION:**

1. This Bylaw may be cited as the “Emergency Services Bylaw No. 264, 2005”.
2. The British Columbia Fire Code Regulation is hereby adopted and in force within the Municipality.
3. Schedule A to this Bylaw form part of and is enforceable in the same manner as this Bylaw.

#### **4. DEFINITIONS:**

In this Bylaw:

“Adult” means a competent person who is at least 19 years of age.

“Approval” means acceptance as satisfactory to the Fire Chief or his designate.

“Building Code” means the Building Regulations of British Columbia made pursuant to the *Local Government Act* and the building regulations enacted by Bylaw of the Municipality pursuant to the *Local Government Act*.

“Chief Administrative Officer” means the person appointed by Council as the Chief Administrative Officer for the District of Highlands.

“Council” means the duly elected Council of the District of Highlands.

“Dangerous Goods” means any product, substance or organism which is of a highly combustible, flammable, or explosive nature, all as set out in the *Transportation of Dangerous Goods Act* (Canada, Chapter 36, 1980, as amended from time to time) and any other material which, because of its toxic or other inherent characteristics, constitutes a fire hazard or a hazard to life, safety, or health, and, without restricting the generality of the foregoing, are classified as follows:

"Explosives" means any substances defined as explosives within the meaning of the *Explosives Act*, R.S.C. 1985, c. E-17, as amended from time to time.

"Fire Chief" means the person appointed from time to time by Council as the Chief of the Fire Department of the Municipality and an Officer, Member or Inspector authorized in writing by the Fire Chief to act on his behalf.

"Fire Code" means the British Columbia Fire Code Regulations made pursuant to the *Fire Services Act*.

"Fire Protection" means all aspects of fire safety including but not limited to fire prevention, fire fighting, or suppression, pre-fire or pre-emergency planning, fire investigation, public education and information, and other staff development.

"High Hazard Fireworks" means those Division 2 fireworks that, in the opinion of the Chief Inspector, are relatively innocuous in themselves and are not liable to explode violently or all at once. "Incident" means any set of circumstances where it can be reasonably expected that there is a danger to the physical well being of persons, or damage to the property of the environment, and includes but is not limited to the following:

- a) Fire
- b) Circumstances where fire or explosion can be expected to be imminent
- c) Circumstances where dangerous or hazardous goods can reasonably be expected to present a danger to persons, property, or the environment
- d) Automobile accidents
- e) Medical emergencies
- f) Electrical emergencies *and*
- g) Search and rescue operations

"Inspector" means a Fire Department member authorized in writing by the Fire Chief to act on his behalf.

"Low Hazard Fireworks" means those Division 2 fireworks that, in the opinion of the Chief Inspector, are relatively innocuous in themselves and are not liable to explode violently or all at once. "Member" means any person who is duly appointed as a member of the Fire Department.

"Municipality" means the District of Highlands.

"Officer in Command" means the senior Fire Department member present.

"Owner" includes Occupier a tenant or lessee, of any land or premises to which this Bylaw applies.

"Private Fire Hydrant" means a fire hydrant located on private property.

"Public Fire Hydrant" means a fire hydrant located on:

- a) a public roadway or right-of-way; or
- b) municipal property

“Rescue” means any situation where a person or persons are saved by a timely and purposeful action from immediate or threatened danger such as death or injury.

**PART II – FIRE DEPARTMENT:**

5. The Highlands Fire Department and the position of Fire Chief as the head of the Department are established and continued.

**6. AUTHORITY OF FIRE CHIEF:**

The Fire Chief shall:

- a) Report to the District Chief Administrative Officer.
- b) Have complete operational responsibility and authority over the Fire Department, subject to the administrative direction and control of the Chief Administrative Officer and Council, and the Fire Department shall carry out all fire protection and incident response activities and such other duties are directed from time-to-time, including but not limited to:
  - 1. Fire suppression
  - 2. Motor vehicle accident extrication and fire suppression
  - 3. Hazardous materials and dangerous goods incidents, including electrical emergencies
  - 4. Pre-fire and pre-emergency planning
  - 5. Medical emergencies as per First Responder protocol
  - 6. Fire prevention activities
  - 7. Fire safety education
  - 8. Rescue incidents excluding water or high angle rescue.
- c) The Fire Chief, or in the absence of the Fire Chief, the highest ranking member present, shall have control, direction and management of all emergency equipment and personnel assigned to an Incident;
- d) The Fire Chief is empowered to cause any building, structure or thing to be pulled down, demolished or otherwise removed if he deems it necessary to prevent the spread of fire to other buildings, structure or things.
- e) The Fire Chief is empowered to enter any premises or property where an Incident has occurred and to authorize any Member, apparatus or equipment of the Fire Department to enter, as deemed necessary, in order to control, combat or deal with the Incident.

- f) The Fire Chief is empowered to enter, pass through or over buildings or property in the vicinity of an incident and to authorize Members and the apparatus and equipment of the Fire Department to enter or pass through or over any building or property where it is necessary to gain access to the Incident or to protect any person or property.
  - g) The Fire Chief is empowered to order all adults present at a fire to assist in its suppression, if required. All persons present at or assisting in the suppression of a fire shall obey the commands and directions of the Fire Chief.
7. The Fire Chief may:
- a) Appoint persons as Members of the Fire Department within the complement established by Council from time to time.
  - b) Make rules and regulations for the proper and efficient administration and operation of the Fire Department, and for the discipline of its Members, and alter or repeal them from time to time as he thinks necessary, *and*
8. The Fire Chief is hereby authorized to administer this Bylaw, and to report violations of this Bylaw to the Council.

### **PART III – OPEN BURNING – PERMITS**

#### **9. PERMITS**

- a) No person shall light or start, or knowingly permit, or cause to be started or ignited, a fire of any kind, whatsoever, in the open air at any time in the Municipality without first obtaining a burning permit from the Fire Chief.
- b) The Fire Chief may designate periods of time when burning permits are not required, for Class B (hand pile 1m x 1m) Permits are required at all times for Class A (machine pile 3m x 3m).
- c) The holder of a burning permit under this section shall ensure that an Adult is in charge of the fire while it is burning or smoldering, and until it is completely extinguished, and shall supply that an Adult with sufficient tools and equipment, ready access to water to effectively prevent the fire from getting out of control or becoming dangerous.
- d) No person holding a burning permit shall start or continue to allow a fire to burn when wind and weather conditions are such that to do so is likely to be hazardous or to create a nuisance.
- e) No person who holds a burning permit shall start or continue to allow a fire to burn except during the hours authorized by the permit.

- f) Every person who starts an outdoor fire who fails to completely extinguish such fire or manage it in such a way that it requires a response from the Fire Department to extinguish it shall be responsible for the costs associated to extinguishing the fire based upon the prevailing charge-out rates for equipment and personnel as may be established from time to time.
- g) No person may burn oil, tar, rubber, plastic, vinyl, fertilizers, chemicals, tires, creosote, wiring insulation, petroleum products, household garbage or any material which produces or may produce toxic or heavy smoke.
- h) Sections 9a) to 9g) do not apply to:
  - 1) confined fires in grills and barbecues for food cooking purposes only;
  - 2) open-air burning for fire training exercises; *and*
- i) Application for a burning permit shall be made at the Municipal Office or Fire Hall and the formal application and permit shall be prescribed by the Fire Chief from time to time.

#### **PART IV – FIRE PROTECTION AND LIFE SAFETY**

##### **10. BUILDINGS:**

No person shall construct a building or structure except in compliance to the Building Code and Fire Code and any other relevant legislation pertaining to such types of construction.

##### **11. EVACUATION**

When the Officer in Command is of the opinion that there is imminent and serious danger to life or property, or that panic is imminent, in an emergency arising from a fire, fire hazard, toxic chemical spill or risk of explosion, he may:

- a) immediately take the steps he thinks advisable to remove the hazard or risk;
- b) cause people to be removed from the area; and
- c) order the evacuation of a building or area;
- d) call upon the police assist and to provide security to the evacuated area.

##### **12. FIRE DAMAGED BUILDINGS**

The Owner of a fire damaged building or structure shall ensure that the premises are guarded, or that all openings in the building are kept securely closed and fastened so as to prevent the entry of unauthorized persons.

##### **13. RULES AND REGULATIONS**

- a) No person shall drive, push or pull a vehicle of any kind over a fire hose or fire equipment without first obtaining permission to do so from a Member.
- b) No person, other than Members of the Fire Department, shall activate or ring a fire alarm except when there is a fire or for testing purposes carried out by persons authorized by the Fire Chief.
- c) No person shall use or allow to be used a standpipe or fire hydrant, or affix a hose to the stand pipe or fire hydrant without permission from the District of Highlands
- d) No person shall park or-stop a vehicle within 15 meters of a standpipe or fire hydrant.
- e) No authorized person shall park a vehicle in a signed prohibited area at a Fire Hall or in a fire lane.
- f) No person, other than Members of the Fire Department, shall carry on, within a building or premises, activities which create a hazard and which are not allowed for in the original design of the building or premises, unless provisions are made to alleviate the hazard and permission is obtained from the Fire Chief to carry out such activities. The Fire Chief shall require that hazardous activities which are permitted by him are carried out in a manner which complies with the Fire Code.
- g) No person shall erect or use a portable incinerator, tar-kettle, or other portable device or appliance for burning rubbish, heating tar or burning waste materials, nor build, set or maintain an enclosed fire outside the walls of a building, without first obtaining a burning permit from the Fire Chief except for a fire pursuant to 2.9(j)(1).
  - i) No person shall use appliances or devices described in this subsection for the purposes mentioned without equipping them with proper spark arresting equipment and other safeguards prescribed by the Fire Chief;
  - ii) The activities requested in this section shall be carried out only in areas designated as safe for the purpose by the Fire Chief.
- h) No person shall enter a hazardous area unless authorized by the Fire Chief.
- i) No person shall obstruct or otherwise interfere with public or private access roads, lanes or streets or other approaches to any fire incident, fire hydrant, cistern, or any connections provided to a fire main, pipe standpipe, sprinkler system or any body of water designated for fire fighting purposes.
- j) No person shall obstruct a Member from carrying out the duties imposed by this bylaw.
- k) No person shall obstruct, hinder, or delay any emergency equipment and every person and vehicle shall yield right-of-way to the emergency equipment; *and*

- l) No person shall discard lighted matches, cigarettes or other burning substances in combustible or flammable material or in close proximity thereto.

**14. PRIVATE PROPERTIES**

- a) An Owner shall with respect to his land and premises:
  - i) maintain Private Fire Hydrants in operating condition;
  - ii) cause all Private Fire Hydrants on his property to be inspected and maintained;
  - iii) notify the Fire Department of any non- functioning fire hydrants and subsequently notify the Fire Department of the completion of repairs to those fire hydrants so that those fire hydrants may be flow-tested and approved;
  - iv) wrap all fire hydrants which are out of service for repair or not yet in service with burlap or black polyethylene plastic sheeting;
  - v) keep fire hydrants clear of ice, snow, shrubs, trees, structures and other obstructions and clearly identify their locations;
  - vi) paint fire hydrants fire department red;
- b) Private fire hydrants are for the use of the Fire Department and may only be operated by qualified persons authorized by the Fire Chief for the purposes of inspection, testing servicing or other fire fighting purposes.

**15. STORAGE OF EXPLOSIVES**

- a) No explosives shall be stored or kept within the District of Highlands unless the person storing or keeping the explosives has been issued a permit issued by the Fire Chief.
- b) The Fire Chief may issue a permit for the storage of explosives that are required for use at construction site. Such explosives on the site where they are intended to be used and must be stored in the manner prescribed by the *Explosives Act* and be consumed during the working day. Explosives not used during the working day must be removed from the District of Highlands by 6:00 p.m. that day; *and*
- c) The Fire Chief shall not allow the storage of more than 1000 kilograms of explosives.

**16. CORRECTION OF IMMEDIATE HAZARDS**

- a) Whenever the Fire Chief or Inspector finds combustible or explosive material, flammable liquids or hazardous chemicals being used, stored or kept in such a

manner as to constitute a threat to persons or property, the Fire Chief may , verbally or in writing, order the owner, tenant, occupant or agent responsible to remove the combustible or explosive material, flammable liquid, or hazardous chemical immediately from the building or premises;

- b) Whenever the Fire Chief finds a building, structure or premise or part thereof which is unoccupied and which, in the opinion of the Fire Chief, is not being kept in safe condition to guard against fire or the risk of fire or other dangerous risk or accident, the Fire Chief may order the owner, tenant, occupant or agent responsible to remedy the dangerous condition and to secure the building, structure or premise or part thereof in such a manner as to prevent any unauthorized entry by any person when it is unoccupied;
- c) In the event of an immediate hazard, if the owner, tenant, occupant or agent responsible refuses or neglects to comply with the order of the Fire Chief to remedy the hazardous condition, or if the Owner, responsible for the building or area cannot be located, the Fire Chief may take such action as is appropriate, without notice and at the expense of the owner, and the District shall recover the expense thereof with costs, in a like manner as property taxes; *and*
- d) Without limiting the generality of the foregoing, when immediate measures must be taken to avoid imminent danger of fire or risk of accident, the Fire Chief may cause the evacuation of any building or area, and he may order the building or area remain evacuated until the hazard is removed, and the Fire Chief may direct the Police and other municipal officials to assist in this regard.

#### **17. ORDER TO REMEDY A HAZARDOUS CONDITION**

- a) The Fire Chief or his designate may issue an Order to Remedy to the owner or occupant of any property on which a fire hazard is found, and the owner shall comply with the order within the time limits specified in the order; *and*
- b) Every person who fails to comply with an order pursuant to this bylaw commits an offence.

### **PART V – INSPECTION OF PREMISES**

#### **18. ENTRY FOR INSPECTION**

- a) In addition to the powers conferred upon the Fire Chief or Inspector in his capacity as a Local Assistant under the *Fire Services Act*, the Fire Chief or Inspector may enter, at all reasonable times, on any property subject to the Bylaw, to ascertain whether the requirements of this Bylaw and any orders issued pursuant to it are being observed and to carry out testing required by this Bylaw.

- b) The Fire Chief or Inspector is authorized to inspect premises in the Municipality for conditions which may cause a fire or increase the danger of a fire, or increase the danger to persons from fire; *and*
- c) The Fire Chief or Inspector is hereby authorized to exercise the powers conferred upon the Fire Commissioner by Sections 21, 22, 23 and 25 of the *Fire Services Act* with respect to matters contained in this Bylaw.
- d) Schedule "A" attached to and forming part of this Bylaw is hereby adopted as the Fire Prevention and Life Safety Inspection Program for the District of Highlands.

#### **19. CONTROL AND ASSISTANCE AT FIRES**

- a) The Fire Chief or Officer in Command may require persons at or near fires to leave the area, and in the event of refusal to leave, may order the person removed by a police officer or member of the Fire Department;
- b) No person shall interfere with the prevention or suppression of a fire; *and*
- c) No person shall prevent the entry of a Member of the Fire Department into or upon any premises for which a fire alarm has been received or where that member has reasonable grounds to believe that there is a fire.

#### **PART VI – FIREWORKS**

20. The *Fireworks Act* applies to the Municipality.

#### **PART VII – ENFORCEMENT**

##### **21. ISSUANCE OF ORDER**

- a) When the Fire Chief or an Inspector determines that:
  - i) a provision of this Bylaw or the Fire Code has been either wholly or in part contravened; or
  - ii) there exists a condition in a building or on property which constitutes a fire hazard or a hazard to life or property;

he may order the owner or occupier to take steps to comply with the Bylaw or remove or remedy the condition which constitutes a hazard.

#### **PARTY VIII – PENALTIES**

22. A person who violates a provision of this Bylaw commits an offence and is liable upon conviction to the penalties established in the Ticket Information Authorization Bylaw of the District of Highlands or upon Summary Conviction a fine under the Offense Act.

**23. SEVERABILITY**

If a portion of this Bylaw is found invalid by a decision of a Court of competent jurisdiction the invalid portion shall be severed without effect on the remainder of the Bylaw.

**24. LEGALITIES / LIABILITIES**

- a) The jurisdiction of the Fire Department is limited to the area of the District of Highlands and emergency equipment shall not be used beyond the limits of the District except pursuant to mutual aid agreements approved by Council.
- b) Any Member acting in good faith in the discharge of the duties required by this bylaw shall not be personally liable for any damage that may accrue to persons or property as a result of any act or omission in the discharge of those duties;
- c) The District of Highlands shall indemnify any Member or former member who acts or acted in the discharge of duties required by this bylaw, against all costs, charges and expenses, including amounts paid to settle an action or to satisfy a judgment, reasonably incurred by the Member in respect of any civil, criminal or administrative action or proceeding to which the Member is made a party by reason of being or having been a Member, if:
  - i) The Member acted honestly and in good faith in the discharge of the Member's duties, following all protocols in accordance with applicable standards;
  - ii) In the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the Member had reasonable grounds for believing that his or her conduct was lawful; *and*
  - iii) The District was put on notice of the action and permitted to assume carriage and control thereof on behalf of the Member.

**25. REPEAL**

"Fire Services Bylaw No. 9, 1994" and amendments thereto and hereby repealed.

Read a first time this	6 <sup>th</sup>	day of	June	2005
Read a second time this	6 <sup>th</sup>	day of	June	2005
Read a third time this		day of		
Adopted this		day of		

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CHIEF ADMINISTRATIVE OFFICER

**SCHEDULE "A"**  
**District of Highlands**  
**Fire and Life Safety Inspection Program**

**Purpose:** To provide a system of regular inspections that will promote an increased level of fire and life safety within the District of Highlands. The British Columbia Fire Services Act requires a Municipal Council to provide for a regular system of inspection of public buildings within a municipality. This program meets the inspection requirements of the British Columbia Fire Services Act.

**Scope:** This applies to all persons appointed by the District of Highlands to fulfill the duties of Local Assistant to the Fire Commissioner (LAFC) or those persons authorized by the District of Highlands or the Fire Chief to conduct Fire and Life Safety Inspections.

**Procedure:** Fire and Life Safety Inspections are to be conducted during the normal hours of operation of the subject property wherever possible. Contact with the property owner and or occupier for the purpose of arranging a mutually agreeable inspection time is recommended where possible if the business is not open on a regular schedule. All properties are to be inspected no less than once per year. Some properties will require more frequent inspections due to special conditions or hazards. These inspection frequencies will be determined on a property by property risk assessment. Inspections are to be conducted using the Fire and Life Safety Inspection Form as a guide and check list. All property and contact information is to be confirmed and updated as required. The information contained within the completed inspection form and any corrections are to be retained by the District of Highlands. A copy of the completed inspection form is to be provided to the owner and or occupier after the inspection is conducted. This copy may be delivered in either an electronic or hard copy format. Issues that cannot be resolved during an inspection may be addressed to other resource people within the District including but not limited to the Fire Chief or his designate, the Building Inspector or the Chief Administrative Officer. The Office of the Fire Commissioner is the provincial resource for Fire and Life Safety information and ultimately is the final authority on all British Columbia Fire Code enforcement decisions.

**Duty to Inspect:** A municipal council must provide for a regular system of inspection of hotels and public buildings in the municipality.

**Definition of an Inspectable Property:** An inspectable property includes but is not limited to the following.

**"Factory"** means a building, premises, workshop, structure, room or place

(a) where any manufacturing process or assembling in connection with the manufacturing of products is carried on,

(b) where thermal, hydraulic, electrical or other form of energy or power is used to move or work any machinery or device in the preparing, inspecting, manufacturing or finishing, or in a process incidental to the preparing, inspecting, manufacturing or finishing, of a product or is used to aid the manufacturing carried on there,

(c) where manual labour is performed by way of trade or for purposes of gain in or incidental to the making of a product, or the altering, repairing, ornamenting, finishing, storing, cleaning, washing or adapting for sale of a product,

(d) or used for the maintenance of aircraft, locomotives and motor vehicles.

**"Hotel"** includes

(a) an apartment house

(b) a residential building that has 2 or more levels of strata lots as defined in the *Strata Property Act*, and one or more corridors that are common property as defined in the *Strata Property Act*, and a boarding house, lodging house, club or any other building, except a private dwelling, where lodging is provided.

**"Public Building"** includes a factory, a warehouse, store, mill, school, hospital, theatre, public hall, office building and any building other than a private dwelling house.

**References:** The British Columbia Fire Services Act, the British Columbia Fire Code, the British Columbia Building Code, and District of Highlands Municipal Bylaws

## **GUIDELINES FOR FIRE AND LIFE SAFETY INSPECTIONS**

### TABLE OF CONTENTS

1. ADDRESS
2. FIRE DEPARTMENT ACCESS
3. OCCUPANCY TYPE / USAGE
4. FIRE DEPARTMENT CONNECTION / WATER SUPPLY
5. UTILITY LOCATIONS
6. MEANS OF EGRESS
7. EMERGENCY LIGHTING SYSTEMS
8. FIRE ALARM SYSTEMS
9. FIRE SUPPRESSION SYSTEMS
10. PORTABLE FIRE EXTINGUISHERS
11. ELECTRICAL, MECHANICAL AND SERVICE AREAS
12. COMMERCIAL COOKING EQUIPMENT
13. FLAMMABLE AND COMBUSTIBLE PRODUCTS AND HAZARDOUS OPERATIONS
14. GENERAL HOUSEKEEPING
15. OTHER

***This document is to be used as a guide to assist while conducting inspections. It is neither complete nor exhaustive in nature. The British Columbia Building Code, British Columbia Fire Code and all applicable Municipal Bylaws are to be consulted for exact code requirements and definitions.***

## **1) ADDRESS**

The address is to be conspicuously posted so that it is clearly visible from the road in both directions. The numbers are to be at least 4" in height and mounted against a contrasting background. Reflective materials assist in meeting the visibility requirements.

## **2) FIRE DEPARTMENT ACCESS**

Clear access for fire fighting apparatus is to be maintained at all times. Impediments to fire access may be in the form of tree branches, vehicles or other items. The road surface must support the loads imposed by fire fighting apparatus during all weather conditions. Long driveways must have turn around provisions. Access widths are to be at least 6 meters unless it can be shown that a lesser width is acceptable. Grades are not to exceed 15%.

## **3) OCCUPANCY TYPE AND USAGE**

The British Columbia Building Code (BCBC) categorizes all buildings and occupancies into an alphabetical listing based on use, design and construction criteria. The following are the categories with examples.

- A1 – Theatres
- A2 – Churches, Assembly Halls, Licensed Beverage Establishments, Restaurants
- A3 – Arenas, Indoor Pools
- B1 – Jails, Prisons and Detention Centres
- B2 – Hospitals, Care Homes, Police Stations
- C – Residential, Apartments, Hotels, Motels
- D – Personal Services, Banks, Doctors Offices
- E – Retail Stores, Shops, Supermarkets
- F1 – High Combustible / Risk - Industrial, Bulk Plants, Spray Coating Operations
- F2 – Limited Combustible - Warehouse, Service Stations, Repair Garages
- F3 – Low Combustible - Sales Rooms, Storage Garages

The type of occupancy and its usage should be determined and recorded to ensure that correct inspection procedures are followed for the specific building and its associated risks. Where properties fall into more than one category of usage, the primary use should be identified and any secondary uses should be noted. Changes to the use of a building from its initially designed usage typically require a building permit application to be made to the District of Highlands. *The building construction type should also be noted during the inspection; i.e. wood frame, concrete block, steel etc. This information assists in future Pre-Fire planning.*

## **4) FIRE DEPARTMENT CONNECTIONS AND WATER SUPPLIES**

Fire department connections must be inspected to ensure that they are visible and accessible. Caps are to be checked to ensure that they are in place and can be removed. They are to be labelled with the required pumping pressures and the areas and systems that they serve.

Hydrants and standpipes must be accessible. Private water systems are to be maintained to ensure that adequate water will be available at all times and in all weather conditions.

## **5) UTILITY LOCATIONS**

The location of all utility service connections should be noted. This includes but is not limited to the electrical service, furnace and fuel oil tanks and pressurized fuel systems and cylinders such as propane. All of these utilities have specific installation criteria that should be followed for their safe use. Further information can be obtained from the Authority Having Jurisdiction of the specific system.

## **6) MEANS OF EGRESS**

### **Exit Doors**

Required exit doors are defined as an opening from the interior of a building or space to the exterior. They may be at the termination of a stairwell, hallway or corridor or they may simply be a door leading from within a room or space to the exterior. Exit doors are a part of the design criteria of a building and typically may not be changed or altered without a building review and permit application. All required exit doors must be such that the door can be opened from the inside without the use of keys, tools or specialized knowledge of the door latching mechanism.

### **Items to inspect**

- ensure doors are kept clear of obstructions on either side
- maximum 20 lbs. pressure to open door
- devices such as slide bolts, chains, hooks and eyes and key to key deadbolts are not permitted on required exit doors at anytime
- when panic hardware is required and installed on a door, no other locking mechanism is permitted at anytime
- stairwell doors and other doors which serve as a fire separation are to remain closed and be equipped with self-closing and latching devices which automatically latch shut when closed
- horizontal exit doors are to be self-closing; they are permitted to be held open magnetically, but must automatically release and latch shut upon activation of the fire alarm system
- draperies and window coverings which cover or obstruct exit doors are not permitted
- mirrors adjacent to or over exit doors are not permitted
- exterior lighting is provided to illuminate the area outside the exit

### **Exit Corridors and Exit Stairshafts**

An exit corridor is a *"means of egress"* leading from an area within a building to an approved exit such as an exterior door, horizontal exit or exit stairshaft.

An exit stairshaft is a fire rated enclosure providing a *"means of egress"* from a floor level above or below grade that terminates at grade.

### **Items to inspect**

- ensure the corridors and stairshafts are kept clear of all storage
- ensure that adequate ambient lighting exists
- ensure that floor and stair tread surfaces do not pose a trip hazard
- ensure that hand and guard rails are adequately secured



## **7) EMERGENCY LIGHTING SYSTEMS**

Exit signs and emergency lights are required to be located in a manner that will provide direction and illumination through a designated path to exit.

Emergency lighting is required in all areas that serve as paths to exit including stairways.

Exit signs are located at required exterior exit doors, in horizontal exits, at doors leading to an exit stair shaft and when a change of direction is required within a path to exit.

The lettering on exit signs is to be at least 4½ inches high with a ¾ inch stroke when the sign is internally illuminated. If the sign is externally illuminated, then the lettering is to be 6 inches high with a ¾ inch stroke.

Internally illuminated exit signs usually have two (2) AC light bulbs and one (1) DC bulb which is the emergency backup. The exception in this area is when the emergency backup supply is an automatic generator and then only two bulbs are provided.

### Items to inspect

- ensure exit signs are visible as you approach the exit
- ensure exit signs are illuminated at all times while the building is occupied
- ensure emergency lighting is provided in all stairwells, corridors and paths leading to exit
- ensure both AC and DC bulbs are functional
- annual service and testing by a qualified technician is required
- emergency generators are required to be tested to the manufacturer's specifications and BC Fire Code requirements. A log book must be maintained which documents all service and testing
- fuel supply for generator is to be sufficient for eight (8) hours of operation

## **8) FIRE ALARM SYSTEMS**

An automatic fire alarm system is designed to provide notification to the occupants of a building that fire or smoke conditions exist. This allows for early and safe evacuation. In order for the system to be reliable it must be maintained. Fire alarm systems that are electrically supervised are to be inspected and tested by qualified personnel at intervals of not more than twelve (12) months. Systems that are not electrically supervised are to be inspected and tested on a monthly basis usually by the occupant and annually by a qualified technician.

### Items to Check

- records for the installation, maintenance and testing of the alarm system
- the fire alarm panel is to be readily accessible and unobstructed at all times
- the AC indicator light is to be illuminated at all times
- zones on the fire alarm annunciator panel are to be clearly identified as to show the area they serve
- the AC circuit breaker for alarm panel is to be clearly marked
- check manual fire alarm pull stations for missing seals, glass plates or glass rods, labels are to indicate "**Local Alarm Only - call 9-1-1**" unless the system is monitored by an accredited monitoring agency.
- check fire and smoke detectors for visual damage due to breakage, painting etc
- check fire alarm gongs, horns, strobes and other signalling devices for damage

## **9) FIRE SUPPRESSION SYSTEMS**

Fire suppression systems are the components that are installed in a building that will activate automatically for the purpose of controlling and / or extinguishing fires. They are frequently found in the form of fire sprinklers. They also include fire hoses and fire pumps that are installed inside a building or area. The BC Fire Code identifies the standard of testing and inspection of these systems through reference to **NFPA 25, "Inspection, Testing and Maintenance of Water-based Fire Protection Systems"**. Special extinguishing systems that use compressed gases or other substances will be included in this grouping due to the similarity in inspection requirements.

### **Items to Check**

- annual testing by an accredited technician is required. The inspection tag (s) must reflect the date of service and the name of the person conducting the service
- all valves are to be clearly labelled with their intended function
- the main shut-off valve (post indicator or OS&Y) and individual riser valves are to be maintained in the **"ON"** position
- sprinkler heads are to be free of paint or damage that would impair their operation
- no storage is permitted within 18" of the level of the sprinkler heads to allow for proper water pattern development
- spare sprinkler heads and a wrench are to be provided
- fire hose cabinets are to be conspicuous and free of obstructions
- fire hose nozzles are to be left in the **"OFF"** position

## **10) PORTABLE FIRE EXTINGUISHERS**

Portable fire extinguishers are designed to be a first line of fire control and extinguishment for the occupants of a building. Early and effective intervention with a fire extinguisher can prevent a small fire from developing into a large fire. It is imperative that the fire extinguisher is properly maintained and readily available in order for it to be effective.

The inspection, testing, maintenance and installation of portable fire extinguishers is to conform to BCFC Section 6.2 and NFPA 10 (Standard for Portable Fire Extinguishers).

### **Items to Check**

- conspicuously mounted at or near exit door(s) or in path(s) of egress
- all levels of the occupancy including mezzanines are required to have portable fire extinguishers
- records of all inspections
- check gauge, seal and service tag. Fire extinguishers are to be serviced on an annual basis by a qualified technician or more frequently if specifically indicated by inspection NFPA 10, 6.1. The date of the annual maintenance check should be recorded on the service tag

### **DEFINITIONS**

**Inspection** -is a **"quick check"** that an extinguisher is available and should operate. This is accomplished by ensuring it is in its proper location, has not been activated, and there is no obvious physical damage or condition to prevent operation.

This inspection is normally performed by the buildings occupants and / or employees.

**Maintenance** - is a *"thorough check"* of the extinguisher. It is intended to give maximum assurance that an extinguisher will operate effectively and safely. It includes a thorough examination and any necessary repair or replacement. It will normally reveal the need for recharging or hydrostatic testing. Maintenance and recharging shall be performed by trained persons having available the proper tools, training, recharge materials and manufacturer's recommended replacement parts.

## **11) ELECTRICAL, MECHANICAL AND SERVICE AREAS**

Electrical, Mechanical, Boiler, Laundry, Storage and Service rooms are to be kept in a neat and orderly fashion at all times to ensure ready access to all equipment and controls.

### Items to Check

- storage is *"not permitted"* in an electrical transformer vault
- no storage is permitted within three (3) feet (one meter) of any electrical component panel(s) in an electrical room
- aisle ways and access ways are to be maintained at least three (3) feet (one meter) in width
- recommended clearances are to be maintained from all furnaces and heating appliances and devices
- service room doors are to be labelled for identification and kept locked to prevent unauthorised entry
- fire separations are to be maintained; these may be in the form of fire dampers, shutters and closures
- storage lockers and rooms which are sprinklered are to limit the height of storage to no closer than 18" (1/2 meter) to the level of the sprinkler heads. Unsprinklered areas are to limit the height of storage to no closer than 36" (1 meter) to the ceiling surface
- laundry rooms are to be equipped with self closing doors that are to remain closed at all times
- laundry lint traps are to be cleaned and maintained so as not to pose an undue fire risk

## **12) COMMERCIAL COOKING SYSTEMS**

Commercial cooking exhaust and fire protection systems are to conform to and be maintained in accordance with NFPA 96, UL 300 and CAN-ULC 1254.6, (*Standard for the Installation of Equipment for the Removal of Smoke and Grease-laden Vapours from Commercial Cooking Equipment*).

### Items to Check

- ensure the fixed fire suppression system is fully charged and displays a valid service tag
- ensure the hood and exhaust system display a current and valid cleaning service tag and that the level of cleanliness is satisfactory
- ensure all cleaning and access panels are accessible
- ensure the manual activation control for the fixed fire suppression system is clearly visible and mounted on a path leading to exit
- ensure a 'K' class portable fire extinguisher is conspicuously wall mounted

### **13) FLAMMABLE and COMBUSTIBLE PRODUCTS and HAZARDOUS OPERATIONS**

The storage, use and dispensing of flammable and combustible products (typically liquids) is to conform to the BCFC. Hazardous operations are individually regulated based upon their risk and regulating agency. Many are regulated by the BCFC such as welding and dust producing processes. Others such as blasting are regulated by other agencies. Confirm your authority through the research of the specific activity and the Authority Having Jurisdiction.

#### Items to Check

- Storage is limited to approved containers
- Flammable and combustible liquids are not stored in or adjacent to exits or paths to exit
- Limits are placed on the quantity of product permitted to be stored depending upon the occupancy

### **14) GENERAL HOUSEKEEPING**

Properties are not to be maintained or utilize storage practises in a manner that will unduly increase the risk or hazard to the premise or its occupants.

#### Items to Check

- Commercial refuse containers are to be placed not less than 10' (3 M) from buildings
- Lids on commercial refuse containers are to be non-combustible and kept closed and locked
- Does the property appear to be well kept given the nature of the occupancy?

### **15) OTHER**

This area is to identify items or areas that are not specifically addressed in the previous points of inspection. They can be quite varied and diverse. They should be listed in detail on the inspection report and researched to confirm that they are in compliance with all applicable codes and requirements.