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PART 11 – FIREFIGHTING

DEFINITIONS

11.01 In this part, the following definitions apply:

“fire chief”

means the highest ranking person in charge of a fire department or industrial fire brigade;

“fire department”

means a fire brigade operated as a public service by an employer or municipality;

“firefighter”

means any worker or volunteer engaged in firefighting, fire inspection, fire investigation, maintenance of firefighting equipment, training for and direction of those activities, or other similar activities;

“firefighting vehicle”

means an emergency vehicle used for firefighting, but does not include personal or private vehicles used by fire fighters to respond to alarms;

“Fire Ground Safety Officer”

means an individual appointed or assigned by the Incident Commander to ensure the safety of other firefighters at the scene of an accident;

“forest fire”

means an uncontrolled fire, fuelled by and spreading through vegetation, that may threaten structures;

“incident”

means a specific emergency operation of a fire department or industrial fire brigade;

“Incident Commander”

means the firefighter in overall command of an incident;

“industrial fire brigade”

means an organization established by an employer to protect the employer’s premises where the nature of the business creates specific hazards for which specialized training and equipment are required;

“NFPA”

means the National Fire Protection Association;

“SCBA”

means self contained breathing apparatus;

“structure”

means a building, vehicle, vessel or similar enclosed location.

APPLICATION

11.02 This part applies to employers and to workers who are employed in firefighting activities on a full- or part-time basis, including volunteer firefighting in municipal service and industrial fire brigades, but does not apply to forest firefighting.

11.03 NFPA, CSA or other standards specified in Part 11 refer to the most current edition of the standard and apply unless another similar standard is acceptable to the director.

GENERAL REQUIREMENTS

- Training for firefighters** 11.04 (1) Firefighters shall be trained in the safe performance of their duties in accordance with *NFPA 1001*.
- Written procedures** (2) Written procedures or a documented training plan shall be established and followed by a fire department or industrial fire brigade to
- (a) manage and track firefighters at an incident,
 - (b) manage exposure to blood-borne pathogens,
 - (c) manage stress arising from incidents that may cause adverse health effects to firefighters,
 - (d) arrange or provide for effective traffic control at incidents, and
 - (e) operate firefighting vehicles during emergency and non-emergency travel.
- (3) Written procedures shall be established and followed by a fire department or industrial fire brigade where workers may be involved in the following situations:
- (a) fires in buildings four stories or over,
 - (b) firefighting over water or underground,
 - (c) fires and other incidents involving hazardous substances,
 - (d) rescue from high angles, confined spaces, trenches, excavations and water, or
 - (e) electrical emergencies.
- Rest and rehabilitation** 11.05 The Incident Commander shall ensure that firefighters at an incident are provided with rest and rehabilitation, which may include food, drinks and a suitable thermal environment.

PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT FOR FIREFIGHTERS

- Personal protective equipment and clothing** 11.06 (1) Firefighters actively engaged in firefighting activities, or who are or may be exposed to hazards associated with firefighting other than forest firefighting, shall wear full protective equipment including helmet, coat, pants, hood, gloves, boots and face shield, which meet the following requirements:
- (a) *NFPA 1971, current edition, Protective Clothing for Structural Firefighting,*
 - (b) *CGSB Standard 155.1-2001, Firefighters' Protective Clothing for Protection Against Heat and Flame,*
 - (c) or other similar standards acceptable to the director.
- SCBA** (2) Where there is a danger of exposure to respiratory hazards, SCBA shall be used by firefighters, and only removed when the Fire Ground Safety Officer or the Incident Commander has determined it safe to do so.
- Safety headwear** (3) Headwear meeting the current requirements of *CSA Standard Z94.1-05, Industrial Protective Headwear* shall be worn by all firefighters
- (a) as required while determining the cause of fire, and
 - (b) at the discretion of the Incident Commander while fighting fire in vegetation that is not within a structure.
- Eye protection** (4) Eye protection shall be provided by the employer and worn by firefighters where they are exposed to the danger of eye injury.
- Hearing protection** (5) Hearing protection shall be provided by the employer and worn by firefighters where they are or may be exposed to excessive noise.
- Inspection** 11.07 (1) Written procedures shall be developed by the employer and implemented

		for regular and periodic inspection of protective firefighting clothing and equipment.
Cleaning	(2)	Procedures for cleaning and drying protective firefighting clothing shall be in accordance with the manufacturer's instructions.
Replacement	(3)	Defective items of protective firefighting clothing or equipment shall be repaired or replaced immediately.
Maintenance	(4)	Firefighters shall keep and maintain personal protective equipment in good condition and submit a written inspection report to the Fire Chief each month.
Safety belts and harnesses	11.08	(1) A firefighter working on an aerial ladder shall wear a safety belt and lanyard that limits a fall to not more than 0.3 m (12 in.) and meets the requirements of <i>CSA Standard Z259.1-05, Body Belts and Saddles for Work Positioning and Travel Restraint</i> . (2) A firefighter working on an aerial platform shall wear a full body harness and lanyard as required by Part 1 – General.
Rescue ropes	(3)	Rescue ropes, rappelling lines, safety belts, harnesses, safety hooks, rope grabs, lowering devices and all related equipment shall meet the requirements of <i>NFPA 1983, current edition, Fire Service Life Safety Rope, Harness and Hardware</i> .
Flotation devices	(4)	Firefighters exposed to the risk of drowning shall be provided and wear personal flotation devices, as required by Part 1 – General.
Personal alert safety system	11.09	(1) A firefighter shall be provided with and use a Personal Alert Safety System (PASS) when the firefighter is involved in duties that require a self-contained breathing apparatus. (2) A PASS device shall meet the requirements of <i>NFPA 1982, current edition, Personal Alert Safety Systems (PASS) for Fire Fighters</i> . (3) A PASS device shall be tested at least weekly and be maintained as required by the manufacturer.

SELF-CONTAINED BREATHING APPARATUS

Training Type	11.10	A firefighter who may be exposed to an oxygen deficient atmosphere or to harmful concentrations of air contaminants shall (a) be trained in the use and limitations of SCBA, and (b) wear and use SCBA of a positive pressure type having a rated minimum duration of 30 minutes.
Certificate of fitness	11.11	Firefighters shall provide a physician's certificate of fitness to use SCBA, if they have (a) experienced breathing difficulty while using the apparatus, or (b) heart disease, impaired pulmonary function, or any other condition that may limit the firefighter's use of the apparatus.
SCBA use	11.12	(1) SCBA shall be used in accordance with <i>NFPA 1981, current edition, Open Circuit Breathing Apparatus for the Fire Service</i> .
Facial hair	(2)	Firefighters who are or may be required to use SCBA shall be clean-shaven so that the mask forms a positive seal against the face.
Fit tests	(3)	Respirator fit tests shall be performed in accordance with <i>NFPA 1981, current edition, Open Circuit Breathing Apparatus for the Fire Service</i> .

		(4) Personal firefighting protective equipment that is usually worn with SCBA, and which might interfere with a proper fit, shall be worn during the fit test.
Corrective eyewear		(5) Only corrective eyewear designed for use with SCBA shall be worn by firefighters.
Sets on site	11.13	(1) Where SCBA are used, there shall be at least four sets of apparatus available at the site.
Spare cylinders		(2) At least one spare compressed air cylinder, having a rated minimum duration of 30 minutes, shall be maintained at full rated capacity and shall be available for each SCBA.
Servicing	11.14	(1) SCBA, including regulators, shall be serviced and repaired by qualified persons in accordance with the manufacturer's instructions.
Inspection of cylinders		(2) Inspection of compressed air cylinders shall be conducted in accordance with <i>NFPA 1981, current edition, Open Circuit Breathing Apparatus for the Fire Service</i> ,
Hydrostatic tests		(3) Compressed air cylinders shall be hydrostatically tested in accordance with <i>CSA Standard B339-02, Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods</i> .
Records		(4) Complete maintenance and repair records for each SCBA and all air cylinders shall be kept in accordance with the requirements of <i>NFPA 1981, current edition, Open Circuit Breathing Apparatus for the Fire Service</i> .
Breathing air	11.15	(1) Air used for breathing purposes shall meet the requirements of the current edition of <i>CSA Standard Z180.1-00, Compressed Breathing Air and Systems</i> .
		(2) Air shall be tested at least once annually in a manner acceptable to the director.
Firefighting in buildings and enclosed spaces	11.16	(1) When SCBA is used to enter a building or similar enclosed location, the entry shall be made by a team of at least two firefighters.
		(2) Effective communication shall be maintained between firefighters inside and outside the enclosed locations.
Rescue team assembly	11.17	Notwithstanding subsection (c)
		(a) prior to entering a building, structure or other enclosed location to perform a rescue or interior firefighting, a rescue team consisting of at least two firefighters shall assemble, in full protective equipment, outside of the building or structure, ready to enter the area,
Rescue team activities		(b) the rescue team shall not engage in any activities that may limit their ability to promptly rescue an endangered firefighter while interior firefighting or rescue work is being conducted, and
Entry prior to rescue team assembly		(c) where a need exists to perform an immediate rescue or interior fire attack, the Incident Commander
		i. shall first make a careful assessment of the situation,
		ii. may authorize firefighters to enter the structure if safe to do so,
		iii. shall give first priority to assembly of a rescue team as additional firefighters arrive at the scene, and
		iv. shall immediately withdraw all firefighters where a rescue team is not assembled within ten minutes of initial entry and not permit further entry until a rescue team is assembled.

TRANSPORTATION

Seating	11.18	(1) Firefighters in firefighting vehicles shall ride in properly secured seats with seat belts and not less than 0.41 m (16 in.) seating width for each occupant.
Headrests		(2) The seats of all new firefighting vehicles ordered subsequent to the effective date of these Regulations shall be equipped with headrests or other effective whiplash protection.
Riding restriction		(3) No one shall ride on any portion of the firefighting vehicle except on the seats.
Firefighting vehicles Communication	11.19	Firefighting vehicles shall
Lights, ventilation		(a) have an effective means of voice communication in the crew cab to allow communication between the driver and passengers,
Enclosed crew cab		(b) if equipped with enclosed crew cabs, be equipped with interior lights and adequately ventilated,
Secured equipment		(c) if purchased after the effective date of these Regulations, have fully enclosed crew cabs meeting the requirements of <i>NFPA 1901, current edition, Automotive Fire Apparatus</i> , and
Vehicle movement	11.20	(d) have all equipment secured.
		11.20 The driver shall not move a firefighting vehicle if the vision of the driver is obscured, except on a signal from a designated person who ensures that the vehicle can be moved safely.
Boarding / de-boarding	11.21	(1) A firefighting vehicle shall be brought to a full stop when workers are getting on or off the vehicle.
Unattended hose		(2) A nozzle-equipped hose-line shall be shut off or effectively secured before it can be left unattended.
Exhaust contamination	11.22	Unless air monitoring shows levels of vehicle exhaust gas components below the allowable exposure limits specified in the <i>Occupational Health Regulations</i> , effective local venting for the exhaust gases shall be provided in vehicle areas in fire halls.

AERIAL DEVICES AND GROUND LADDERS

Aerial device standards	11.23	(1) An aerial device used for firefighting shall meet the requirements of <i>NFPA 1901, current edition, Automotive Fire Apparatus</i> .
Inspection		(2) A fire department aerial device shall be inspected and tested in accordance with good engineering practice at intervals not exceeding 12 months, and certified as safe for use by a professional engineer or the equipment manufacturer.
Inspection standard		(3) The inspection and testing of a fire department aerial device shall be done in accordance with the requirements of <i>NFPA 1914, current edition, Testing Fire Department Aerial Devices</i> .
Turntable lock	11.24	(1) The turntable on an aerial device shall be fitted with a positive locking device to hold it in any desired position.
Qualified operator		(2) During the operation of an aerial device, a qualified operator shall be present at the lower controls in sight of, and in voice contact with, any firefighters upon the device.
Ladder standards	11.25	(1) A ground ladder used by firefighters shall meet the requirements of <i>NFPA 1931, current edition, Design of and Design Verification Tests for Fire Department Ground Ladders</i> .

- (2) A ground ladder shall be used, tested and maintained in accordance with the requirements of *NFPA 1932, current edition, Use, Maintenance, and Service Testing of Fire Department Ground Ladders*, or other similar standard acceptable to the director.

OTHER EQUIPMENT

Flashlights

- 11.26** (1) Battery operated flashlights and hand lanterns shall be CSA approved for hazardous locations classified under *CSA Standard C22.1-94, Canadian Electrical Code, Part 1, as Class 1, Division 2, Groups A, B, and C*, and are provided as follows:
- (a) one flashlight for each firefighter, and
 - (b) at least four extra flashlights for each firefighting vehicle.

Plaster hooks / pike poles

- (2) Plaster hooks and pike poles used in firefighting shall be fitted with electrically non-conductive shafts.

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