

The Occupational Health and Safety Code made by the Occupational Health and Safety Council on September 23, 2003 was adopted and came into force on April 30, 2004.

A Code of Practice for Fire Fighters

**Application of the Alberta Occupational Health and Safety
Code to Emergency Operations of the Fire Service in Alberta**



Purpose:

This **Code of Practice** provides explanations of Alberta's Occupational Health and Safety Act (the Act) (O-2 RSA 2000), Occupational Health and Safety Regulation (the Regulation: 62/2003) and the Occupational Health and Safety Code (the OHS Code) as those laws pertain to the emergency operations of a fire department in Alberta. This **Code of Practice** is intended to deal primarily with the special work sites commonly known by the emergency services industry as an *emergency incident* and to situations where workers involved in delivering emergency services are responding at these sites. This **Code of Practice** is designed to set out the minimum standards to which a fire service must comply with the above mentioned health and safety legislation and looks specifically at those sections of the legislation where clarification and explanation in their application to the fire service and *emergency operations* has been requested. Where there is no explanation provided, the reader is referred back to the applicable section(s) of the OHS Act, Code, or Regulation.

The main goals of the legislation are to prevent accidents, injuries and exposures, and to reduce the severity of the accidents, injuries and exposures that do occur among Alberta's workers, including firefighters.

Any reference to 'worker' in the legislation or in this **Code of Practice** is meant to be interpreted in its broadest sense and includes all persons working for an employer and includes firefighters, officers, chief officers, supervisors, managers, directors etc., regardless of their employment status. Firefighters employed as volunteer, part time, full time or any combination of these are also considered to be workers by the OHS Act.

Copies of the OHS Act, Regulation or Code are available at websites listed below:

Workplace Health and Safety www.gov.ab.ca/hre/whs/index.asp

OHS Acts, Regulations and Codes www.gov.ab.ca/hre/whs/law/index.asp

Fire Commissioner's Office www.municipalaffairs.gov.ab.ca/fco/index.cfm

This Code of Practice refers to "Part 1", "Part 2", "Part 3" and so on. These references relate directly to the "Parts" or chapters of the OHS Code. Readers are directed to the

identically named parts of the OHS code where the complete legislated requirements can be found.

Explanatory Notes-Interpretation:

1. Part 1: Definitions and General Application

a. For the purposes of understanding this **Code of Practice**, the following definitions are provided. Please note these definitions are not included in the OHS Legislation, but are helpful in applying the legislation.

- i. **“emergency incident”** means the circumstances giving rise to a specific emergency operation;
- ii. **“emergency operation”** means activities relating to rescue, fire suppression, emergency medical care and special operations, and includes the response to the scene of an incident and all functions performed at the scene;
- iii. **“firefighter”** means a worker whose duties include:
 - i. emergency operations, fire inspection and fire investigation, and
 - ii. training for the activities mentioned in subclause (i); and includes a worker whose duties include directing any or all of the activities mentioned in subclauses (i) and (ii);

Note: For the purposes of this document the terms “worker” and “firefighter” can be used interchangeably.

Firefighters may be employed as volunteer, part time, full time or any combination of these.

- iv. **“standard operating procedure”** or **“standard operating guideline”** means an operational directive prepared by an employer that establishes a standard course of action for the emergency incidents to which a firefighter is required to respond;

- v. “**structural firefighting**” means the activities of rescue, fire suppression and property conservation involving buildings, enclosed structures, vehicles, vessels, aircraft or other large objects that are involved in a fire or emergency incident.
2. **Training of firefighters** is addressed in Part 1 of the OHS Code under the definition of “competent”.
- a. Three characteristics are used to describe a worker as competent: (*see OHS Code Explanation Guide for more detail*)
 - i. Adequately qualified,
 - ii. Suitably trained, and
 - iii. With sufficient experience to safely perform work without supervision or with only a minimal degree of supervision.
 - b. The required training provided to a *firefighter* must:
 - i. Be provided before the *firefighter* is permitted to engage in emergency operations, except for on-the-job training assignments conducted under close supervision;
 - ii. Be provided by competent persons. (A competent person includes a person who has expertise or abilities in subject areas whether or not the person is a member of a fire department);
 - iii. Address occupational health and safety hazards associated with each of the operational assignments;
 - iv. Match the duties, functions and role that the *firefighter* is expected to perform;
 - v. Address procedures required to perform operational assignments including sudden changes in conditions;
 - vi. Address the incident management system and personnel accountability systems used by the fire department;

- vii. Address the safe operation of equipment that is required to perform the operational assignments; and
 - viii. Be reviewed periodically in consultation with workers to ensure its adequacy.
- c. Although not specifically required in the OHS Code, records of the training provided to *firefighters* should be retained and could include, amongst other things,
- i. Names of persons receiving training,
 - ii. Nature of the training, and
 - iii. Dates when training was provided, and
 - iv. Name of training officer and /or agency.

Please note there are mandatory retention periods for driver training records that can be found in the Traffic Safety Act (T-6 RSA 2000) and its Regulations. Please see the Alberta Infrastructure and Transportation website for further information at www.inftra.gov.ab.ca

3. Part 2: Hazard Assessment, Elimination and Control:

- a. Section 7 of the OHS Code requires an employer to assess a worksite for hazards, determine how hazards will be dealt with, record all of this, communicate the procedures to workers and re-evaluate the entire process at regular intervals.

The requirement for a written hazard assessment prior to the start of work is neither possible nor practical during *emergency operations* at an *emergency incident* worksite. It is possible however, to achieve an acceptable result respecting firefighter safety in advance of an emergency operation.

The following points outline the planning process that must be followed at minimum to ensure safe operations at an *emergency incident* and compliance with the OHS legislation. These points recognize a fire department may provide and perform any number or type of emergency services, at varying degrees of complexity, based on the resources of the municipality/owner and the technical

expertise available to that fire department. Taken together, they will constitute a written plan that encompasses the requirements of the Hazard Assessments outlined in Part 2 of the OHS Code.

- i. Each employer must determine exactly what emergency service(s) the fire department will be authorized to provide and identify the level or standard to which each service will be performed. This includes response to structural fires, wildland fires, and various rescue situations including technical rescue, dangerous goods and Chemical, Biological, Radiological and Nuclear (CBRN) incidents among others.
- ii. Once these decisions have been made, this service level determination would be committed to writing that might be in the form of bylaw, policy or guideline. The employer must then clearly communicate to *firefighters* what is expected from them as workers when responses are made. The means of communicating and maintaining this information is through the collection of guidelines, (commonly referred to as *standard operating procedures or guidelines* (SOP's or SOG's)) and policies which describe the authorized activities of the fire service and how the activities are to be performed as required by sub-section 3(b)(i) above. These documents form the basis of the written plan.
- iii. The guidelines and policies required in subsection (ii) must include:
 1. Identification of the standard firefighting functions or evolutions expected of firefighters based on the emergency services to be offered, including functions or evolutions that must be performed simultaneously;
 2. The minimum number of *firefighters* required to safely perform each identified firefighting function or evolution;

3. The specific worker safety rules, procedures, and first aid and medical attention services for *firefighters* to be followed at each type of emergency incident;
 4. The number and types of firefighting vehicles, equipment and *firefighters* required for the initial response to each type of *emergency incident* to which *firefighters* might reasonably be expected to respond that includes policies or procedures to be followed where minimum staffing or equipment levels cannot be met;
 5. A guideline or policy on the minimum training a fire fighter must be given before being considered competent to perform certain emergency operations functions as identified in subsection 3(b)(i) above.
 6. A detailed description of the incident management system to be followed at an emergency incident, and
 7. A detailed description of the personnel accountability system to be used at each emergency incident.
- b. All *firefighters* employed in the fire department must receive instruction on how to receive instructions in identifying the various hazards a firefighter might encounter and describe, to the extent possible, the actions to be taken that will limit or eliminate exposure to those hazards.
- c. A fire department is not necessarily required to rewrite the guidelines, pre-fire plans, policies or *standard operating procedures* that it currently has in place. Existing documentation should be reviewed and organized to ensure that it addresses all the topics identified in subsection 3(b). All of this must be effectively communicated to *firefighters*.
- d. Section 9 of the OHS Code requires an employer to either eliminate or control hazards to the lowest level possible. In the fire service, engineering and PPE are an effective and mandatory means for improving fire fighter safety but

they are not sufficient in and of themselves without the addition of administrative tools. Administrative controls required include an effective incident management system as mentioned in sub-section 3(b)(iii)(6) above and an effective personnel accountability system as contemplated in sub-section 3(b)(iii)(7). The incident management system must ensure:

- i. Roles and responsibilities are clearly defined for each worker attending the scene of an emergency incident;
- ii. Effective communication enables *firefighters* to understand their responsibilities during an assigned task;
- iii. Effective co-ordination prevents conflicting activities and ensures that a proper sequence is followed while conducting an assigned task. This becomes increasingly important as more agencies are involved in mitigation activities;
- iv. Adequate risk assessment and management is conducted prior to intervention; and
- v. Proper assignment of sufficient numbers of adequately trained *firefighters* to conduct an assigned task.

A personal accountability system must enable the:

- i. Identification of *firefighters* arriving at the scene of an incident;
 - ii. Identification of *firefighters* entering and leaving hazardous areas; and
 - iii. Tracking of *firefighters* and other support personnel by both location and function.
- e. Both the Incident Management System and Personnel Accountability System may be satisfied by a number of systems that are available and recognized by the fire service. The type and complexity of these systems will depend on local conditions and anticipated operations.

4. Part 3: Specifications and Certifications

- a. Part 3 of the OHS Code applies to all firefighting equipment and requires that equipment be:
 - i. Inspected according to manufacturer's specifications to ensure *firefighter* safety while the equipment is being used;
 - ii. Clearly marked with the limitations of the equipment based on current standards;
 - iii. Training must be provided to every firefighter required to use the equipment on the selection, pre-use inspection and the actual use of the equipment and that each firefighter be trained regarding equipment limitations;
 - iv. Used within the known limitations and in a manner that does not endanger the health or safety of a firefighter; and
 - v. Maintained according to manufacturer's specifications.
- b. The provisions of Part 3 are not intended to hinder the development of some fire hall inventions where the invention is safe for use. However, the implications of doing so must be understood and caution exercised. A product modified without the consent of the manufacturer, or without having been certified by a professional engineer, may exceed the safe performance limits of the product, void the product warranty, and result in the employer being held liable for any consequences resulting from use of the modified product.
- c. The fabrication of invented devices must be done by persons competent to perform that work. Welding must be done by a competent welder; electrical work by a competent electrician or electronics specialist; final mechanical design by someone competent in assessing loads, forces, etc.; non-destructive testing (NDT) by someone competent in NDT testing and evaluation; etc. Even a seemingly simple invented device, when coupled to a system that controls or influences the release of energy e.g. water under pressure or

hydraulic or pneumatic systems, or “improves” the way that a breathing-air system operates for example, can result in harm to workers and others.

- d. Consider the implications of device failure or misuse before putting the device into service. If there is any question as to the safety of the device, have it certified by a professional engineer.
- e. Where existing equipment that is currently certified by a certification and testing body, manufacturer or engineer is modified however; the certification will require review and renewal. The employer must either get the manufacturer to approve the new use or obtain certification of the equipment by a professional engineer.
- f. All fire department pumping apparatus, water tank trucks, ladder trucks, aerial devices, mini-pumpers, special services firefighting vehicles and combinations of these should be designed and constructed in accordance with a commonly accepted Alberta or industry standard. For example, compliance with CAN/ULC-S515-04, Automobile Fire Fighting Apparatus and with the manufacturer’s recommended specifications would be considered an acceptable design standard. CAN/ULC-S515-04 is not a legislated standard but it is the commonly relied upon and accepted standard for specifying automotive firefighting apparatus in Alberta. Ongoing maintenance and operation of vehicles would be subject to the provisions of the Traffic Safety Act (T-6 RSA 2000) and its Regulations.

5. **Part 4: Hazardous Substances**

- a. Part 4 of the OHS Code applies to firefighting as it is written and includes exposures that might occur during any *emergency operation* and not just those exposures possible during designated hazardous materials or dangerous goods responses.
- b. Employers whose *firefighters* may be exposed to harmful substances must complete a hazard assessment as outlined in section 3 of this **Code of Practice**. Key requirements include identification of potential exposures,

development of protective procedures and training of *firefighters* in those procedures. It is not necessary to develop a written SOG/SOP regarding every possible chemical a *firefighter* might be exposed to in your service. What is expected is that procedures will be developed and personal protective equipment will be supplied and mandated that will protect the health and safety of *firefighters* when they respond at your stated service level. The policy or procedure would also cover

- i. the training and awareness levels to be received by each *firefighter*
 - ii. the means by which they can obtain the information on an exposure to any known substance and the decontamination requirements,
 - iii. limitations of his/her PPE
 - iv. what the department does in the event of a response to an incident where there may be an exposure to that substance, and
 - v. The location of Material Safety Data Sheets (MSDS) and similar resources.
- c. Decontamination capabilities or facilities must be provided or arranged, based on the potential exposures that *firefighters* might reasonably expect based on your stated service level. This includes the ability to decontaminate their person, clothing, equipment and apparatus. No *firefighter* should be permitted to leave any worksite or the firehall where there is a possibility they may be carrying harmful substances on their person or clothing.
- d. The Code requires employers to maintain documentation of *firefighter* exposures to specific harmful substances in limited circumstances (asbestos, silica and coal dust); the steps taken to mitigate the exposure and any ongoing monitoring. In all other cases reporting, record keeping and ongoing monitoring must, at a minimum, be in compliance with Worker's Compensation Board policies. See sections 32 and 33 of the Workers' Compensation Act (W-15 RSA 2000)

6. Part 5: Confined Spaces

- a. A confined space definition is provided in Part 1 of the OHS Code and is expanded upon in the OHS Code. It includes tanks and other structures not intended for human occupancy. It does not generally apply to houses and other normally inhabited structures.
- b. If a fire department is providing emergency rescue services involving a confined space entry, it must comply with the requirements of this Part. Testing the atmosphere of a burning structure for toxic, flammable or explosive substances may be impractical. It is made unnecessary if complete respiratory protective equipment and other personal protective equipment appropriate to the conditions within the confined space are used.
- c. If a confined space entry is being made in other than a burning structure, and the site hazard assessment identifies a potential hazard, then pre-entry atmospheric testing must be done using a calibrated test instrument.
- d. A written code of practice (SOP/SOG) must be developed and training in its requirements and procedures must be provided to any *firefighter* assigned to these duties.
- e. The records requirement of section 58 of the Code concerning entries is satisfied by retaining the incident command sheets and run reports for the stated timeframe.
- f. Accountability systems as described in sub-section 3(e) of this **Code of Practice** are required for emergency confined space entry rescue. These accountability systems must provide a comparable or superior level of worker safety to the permitting systems described in subsection 47(1) of the OHS Code.
- g. An effective rescue plan that gets *firefighters* out of the confined space without causing further injury to the injured worker and without placing firefighters in undue peril must be developed with training provided to all affected *firefighters*.

7. Part 6: Cranes, Hoisting and Lifting Devices

- a. If a fire department is utilizing cranes, hoists, winches or similar pieces of equipment with rated load capacities of 2,000 kilograms or more, this section applies as written. Most fire departments do not operate this type of equipment.
- b. This section requires that an employer ensure that the proper lifting device is selected and used for the task, that it be labeled with its rated load capacity, that only trained *firefighters* operate the lifting device and that a log be maintained that records inspection, use and maintenance activities for the lifting device.

8. Part 7: Emergency Preparedness and Response

- a. This section applies as written. A fire department may have already addressed this Part thorough the planning required under Part 2 Hazard Assessment, Elimination and Control.
- b. Part 7 of the OHS Code should be viewed as an opportunity for fire departments to plan for how *firefighters* and other workers at an incident will be looked after if things go wrong and a *firefighter* is injured, not how the *emergency operation* will be mitigated or how victims of the *emergency incident* will be cared for. Every fire department should develop an SOG/SOP covering the points listed in subsection 116 of the OHS Code.

9. Part 8: Entrances, Walkways, Stairways and Ladders

- a. With the exception of having top ensure the presence of primary and secondary escape routes, this Part does not apply to fire department *emergency operations*. Note: see fall protection below.
- b. This Part does apply to firehalls.

10. Part 9: Fall Protection

- a. The “rescue personnel exemption” presented in Part 9 of the OHS Code *does not* exempt firefighters from using fall protection equipment and practices. It

does exempt firefighters from using the equipment and practices specified in Part 9, allowing the use of alternative equipment and practices. Whereas Part 9 specifies the use of “industrial”-type fall protection equipment and practices, the exemption allows firefighters to use alternate equipment and practices. The practices used must provide an effective measure of worker safety and address the unique hazards that a rescue or firefighting worksite presents. The practices must also be documented in the department’s SOG’s/SOP’s. A fall protection plan, as required by section 143 of the OHS Code, must be prepared.

11. Part 10: Fire and Explosion Hazards

- a. This Part applies to the fire service in all activities, including training. Part 10 was never intended to apply to burning buildings or exploding structures. Section 165 of this part does not apply to emergency situations.
- b. Although Subsection 162(1) prohibits a worker from entering an area that exceeds 20 percent of the lower explosive level of a flammable or explosive substance, 162(2) allows entry of a competent *firefighter* who is responding in an emergency.
- c. Nevertheless, routine entry of a firefighter into an area in which there is a flammable or explosive atmosphere should be discouraged because of the potential for a fire or explosion with life-threatening consequences. An on-site hazard assessment should critically review the need to enter the area against the alternatives of not entering the area, or dispersing/diluting the atmosphere below the lower explosive limit of the flammable or explosive substance present and then entering the area after atmospheric testing with a calibrated test instrument confirms it is safe to do so.
- d. *Standard Operating Guidelines/Procedures* need to be developed as a part of the planning process on how a fire department is going to provide for the safety of *firefighters* working in *emergency operations* involving the fire and explosion hazards identified in this Part.

12. Part 11: First Aid

- a. The rules identified in this Part apply to the fire department personnel while dealing with the *emergency incident*. All requirements of this Part apply as written to all fire department activities including all record keeping identified in Sections 183 and 184.
- b. Key requirements include:
 - i. Fire departments are required to provide first aid supplies, equipment and staff and must supply it in accordance with Table 7 of the OHS Code, based on the numbers of personnel attending.
 - ii. Emergency transportation of injured *firefighters* must be considered and arranged as a part of the department's written SOG/SOP's. This does not imply that an ambulance is required on site.
 - iii. Firefighters must report injuries to the employer at the earliest practicable opportunity.
 - iv. Employers must retain records of acute illnesses or injuries, including exposures to harmful substances, on any worker as required in Section 183 of the Code.
- c. The required first aid providers at an *emergency operation* may be assigned to perform other duties as long as they remain available and in a fit condition to immediately provide those first aid duties required by the Code.

13. Part 12: General Safety Precautions

- a. Only the provisions of sections 186, 191, 194 and 195 apply to the fire department during emergency operations.
- b. Subsection 186(1) requires lighting at a work site to be sufficient to allow work to be done safely. This means that additional light sources may need to be placed in the work area to allow firefighters to perform their duties.

- c. Section 191 describes the requirements applicable to firefighters acting as designated signalers and to equipment operators being guided by those signalers.
- d. Section 194 requires that firefighters providing traffic control be provided with training, retro-reflective clothing, signage and illuminated signal lights. It also provides guidance for employers on the steps that must be taken to protect firefighters performing their duties on roadways where traffic may be dangerous. Again, documented SOG's/SOP's are required for this type of work assignment.
- e. Section 195 places duties on the employer to ensure that ice is thick enough to support the load placed on it in the event that firefighters must work on an ice surface. The section only applies if the water beneath the ice is more than 1 metre deep.

14. Part 13: Joint Work Site Health and Safety Committee

- a. This Part does not directly apply to the fire service.

15. Part 14: Lifting and Handling Loads

- a. This Part applies to the fire service, as written.
- b. The hazard assessment required in Section 210 of the OHS Code for manually handling a load that could injure a worker should be considered in the development of standard operating procedures/guidelines and is part of the hazard assessment process considered in Part 2.

16. Part 15: Locking Out

- a. This Part does not apply to *emergency operations*. Section 212(1) outlines the areas where locking out is required, and includes servicing, repairing, testing or adjusting. As Fire departments do not do any of these activities during emergency operations, this section does not apply. Never the less, an emergency response service should always ensure that electrical energy has been isolated prior to applying a wetting agent to a fire.

- b. A fire department should develop SOP/SOG's outlining safe work procedures when dealing with rescue, extrication or other emergency activities around equipment presenting potential hazards to workers.

17. Part 16: Noise Exposure

- a. This Part applies as written to *firefighters*.
- b. Employers must take all reasonable measures to reduce noise levels to which firefighters are exposed. Noise reduction strategies may include engineering controls, considering noise levels in equipment and apparatus at the time of purchase and the retrofitting of current equipment/apparatus with noise suppression technology. An example of where engineering has helped reduce noise exposure is the movement of sirens from the roof of apparatus to the front bumper, reducing noise levels in the passenger compartment.
- c. Where noise reduction is not reasonably possible, the employer must provide hearing protection and training on its use. Tables located in Schedule 3 of the OHS Code provide information on levels of permissible exposure and appropriate hearing protection that must be employed.
- d. A workplace noise exposure assessment must be undertaken to determine what noise level *firefighters* might be exposed to at routine emergency operations. If the results of the assessment indicate that noise levels exceed exposure limits listed in Schedule 3, Table 1 of the OHS Code, it will be necessary to develop and implement a noise management program as required in Section 221.
- e. If it is identified that *firefighters* are being exposed to excessive noise, audiometric monitoring must be provided, at the employer's expense. Section 223 provides detailed instructions on what that testing entails.

18. Part 17: Overhead Power Lines

- a. The safe limits of approach to energized overhead power lines identified in Section 225 are applicable to the fire service.

- b. *Standard operating procedures/guidelines* and training including preplanning with utility providers is essential to safe emergency operations around energized overhead utility lines.

19. Part 18: Personal Protective Equipment

- a. Based upon the hazard assessment performed under Part 2, the employer must ensure that such personal protective equipment (PPE) as is required to protect the *firefighter* from the hazards of the job is used. The hazard assessment may indicate the need for:
 - barrier devices to protect against exposure to blood and bodily fluids
 - eye/face protection during vehicle extraction
 - balaclava under headwear as protection against heat exposure and fire
 - skin protection against contact with chemicals
 - protection against contact with an operating chainsaw, etc.
- b. The only firefighting standards identified in this Part are:
 - i. Section 233 requiring *firefighter* footwear to comply with the listed NFPA or CSA standards; and
 - ii. Section 237 allowing an employer to consider head protection complying with NFPA 1971 or 1977 where the hazards a *firefighter* might be exposed to requires special protection, such as in structural or wildland firefighting.
- c. In all other cases the employer must be able to demonstrate that he has provided acceptable protection levels for the hazards faced by *firefighters* based on a hazard assessment of the department's operations. The use of clothing and equipment that complies with such standards as CSA, ANSI, NFPA, CGSB and other recognized agencies should be identified in departmental purchasing policies and procedures.
- d. Care must be taken not to assume that equipment certified or intended to protect against one hazard can effectively protect against another. For

instance, bunker gear provides effective protection against the hazards of structural firefighting conditions but actually adds to the hazard level a *firefighter* faces when dealing with a water rescue. PPE must be provided based on the hazard assessment done in compliance with the requirements of Part 2.

- e. Section 245 of the OHS Code identifies the need to develop and implement a code of practice governing the selection, maintenance and use of respiratory protective equipment. Section 247 provides direction on what must be considered when providing respiratory protection. Self-contained breathing apparatus (SCBA) may not be the only respiratory protective gear required by a fire department. The manufacturer's maintenance schedule should be referenced as a part of the required code of practice.
- f. Employers must ensure that air used in SCBA and airline equipment meets the requirements of CSA Standard Z180.1-00, Compressed Breathing Air and Systems. Regular testing by competent persons is essential.
- g. Sections 244 and 250 require that employers ensure *firefighters* who must use respiratory protective equipment that depends on an effective face seal are provided with equipment that fits them properly. Fit testing must be provided to all firefighters and equipment must be made available in the correct sizing. It also requires that any person requiring this type of respiratory protective equipment be clean-shaven where the face piece seals to the skin of the face.
- h. Firefighters are required to use the PPE provided described in subsection 228(2). This includes any person exposed to the hazards of the workplace, including incident commanders and other officers.

20. Part 19: Powered Mobile Equipment

- a. This section applies to the safe operation, fueling and maintenance of all fire department vehicles, including apparatus, cars, trucks and off-road vehicles such as snowmobiles and ATV's.

- b. *Firefighters* assigned to operate powered mobile equipment must be competent and authorized by the employer and to do so in a safe manner.
- c. Inspections and maintenance, including pre and post trip inspections, in accordance with the manufacturer's specifications, is required on all powered mobile equipment and records must be maintained.
- d. Equipment that must be carried in the passenger compartment must be stored or affixed in such a manner that it cannot become a projectile in case of an accident or emergency stop.
- e. There are special requirements for all terrain vehicles (ATV), including a prohibition on the use of three wheeled ATV's.

21. Part 20: Radiation Exposure

- a. Part 20 applies to all worksites, including *emergency operations*.

22. Part 21: Rigging

- a. Part 21 applies to all worksites, including firefighting and rescue applications.
- b. Ropes, cables and all equipment associated with lifting personnel or materials must be inspected, maintained and used in compliance with this Part.
- c. The use of "home made" or makeshift rigging components that are load bearing is prohibited.
- d. Maximum load ratings of all rigging must be available to workers at the site.
- e. Any standard operating procedures/guidelines adopted by fire departments must follow manufacturer's recommendations for the equipment and follow best industry best practices. If those procedures vary from those outlined in the Code, they must provide for a comparable or superior level of *firefighter* safety.

23. Part 22: Safeguards

- a. Where a manufacturer has provided a guard or offers one as an option for the safe operation of a piece of equipment, it must remain in place and be used as

intended. Please see Section 4 of this **Code of Practice** for implications when changing or altering designs.

24. Part 23: Scaffolds and Temporary Work Platforms

- a. Those sections of this Part dealing with fire apparatus employing elevated ladders, booms or platforms apply to all fire department activities.
- b. Fire apparatus with elevated ladders, booms and platforms should be designed in accordance with CAN/ULC-S515-04 as the minimum acceptable design standard (See Section 4 of this Code of Practice).
- c. Section 138 of the OHS Code allows *firefighters* to use alternate means of fall protection during emergency operations.

25. Part 24: Toilets and Washing Facilities

- a. Employers must provide drinking fluids at all work sites in adequate supplies. These fluids must include potable water and be made available in a sanitary manner in amounts sufficient for the numbers of *firefighters* and the conditions in which they are working.
- b. Section 356 of the OHS Code requires that an employer make arrangements for access to toilet facilities for *firefighters* at temporary worksites, including emergency operations. Pre-planning must consider *firefighter* rest and recovery (rehabilitation) and personal needs.

26. Part 25: Tools, Equipment and Machinery

- a. This Part applies to all work sites, including those involving *emergency operations*.

27. Part 26: Ventilation Systems

- a. This Part is meant to apply primarily to the firehall and other buildings in a normal mode, not to buildings affected by fire and other emergencies. However, the requirements of this Part do apply in situations such as when a technical rescue team uses portable ventilation systems during a confined space rescue. In such cases the team may be dealing with airborne

contaminants; hazardous fumes, gases, or particulates; a flammable atmosphere; or an atmosphere lacking in oxygen. Sections 386 through 388 specify requirements that must be met when ventilation systems are used in such situations.

28. Part 27: Violence

- a. This section applies to all fire department activities.
- b. When the hazard assessment required in Section 7 is developed, violence in the workplace must be considered. A policy and procedure specific to workplace violence must be developed.
- c. Training must be provided to *firefighters* on how to recognize workplace violence, what policies and procedures the department has developed and what their role in the process might be.

29. Part 28: Working Alone

- a. This Part applies to all worksites, including *emergency operations*. Provisions must be made to keep track of all *firefighters*, including those who might have to be away from the main body of *firefighters*. It must provide them with the means of contacting assistance should it be required and for the department to check on their status at reasonable intervals.
- b. Standard operating procedures/guidelines must be developed to cover each task that might require someone to work alone. Examples of lone worker situations may include incident commanders, inspectors, investigators, and tanker operators.

30. Part 29: Workplace Hazardous Materials Information System

- a. All hazardous products used by a fire department must be used, stored and handled in accordance with this Part.
- b. Fire department personnel are required to receive training in WHMIS in accordance with section 397 of the OHS Code.

- c. The WHMIS requirements apply to the fire department, products that it uses and its operations, not to hazardous products that it may encounter at an *emergency operation*.

31. Part 30: Demolition

- a. If a fire department must fully demolish a structure in the course of its suppression activities, section 419 as it pertains to the disconnection of utilities applies. Critical utility disconnections include natural gas, propane and electricity.

32. Diving Operations

- a. Part 31 applies to all diving operations provided by fire departments.
- b. Fire department diving operations cannot be classified as sport diving.

33. Part 32: Excavating and Tunneling

- a. Although this section does not normally apply to fire department *emergency operations*, all due care must be taken, including the development of standard operating guidelines/procedures, training of *firefighters* and provision of adequate shoring and other necessary materials before committing to respond to emergencies involving excavations and tunneling.
- b. Any SOG/SOP's developed must comply with fire industry best practices.

34. Part 34: Explosives

- a. Many fire departments provide fireworks and pyrotechnic services in their community. All sections of this Part dealing with fireworks must be complied with, including storage, transportation, handling, qualifications and safe work procedures/practices.

35. Part 34: Forestry

- a. This Part does not apply to the fire service.

36. Part 35: Health Care and Industries With Biological hazards

- a. This part applies to the fire service in all situations, including *emergency operations*. It requires an employer to establish policies and procedures regarding biohazardous materials, to provide *firefighters* with adequate training and to supply appropriate protection, including sharps containers to minimize the likelihood of *firefighter* exposures.
- b. Policies and procedures must be developed and implemented to deal with post-exposure management for *firefighters* who have been exposed to biohazardous materials.

37. Part 36: Mining

- a. This part does not apply to the fire service.

38. Part 37: Oil and Gas Wells

- a. This Part does not apply to the fire service.

39. Part 38: Residential Roofing

- a. This Part does not apply to the fire service.

40. Part 39: Tree Care Operations

- a. This Part does not apply to the fire service.