

APPENDIX 2

FIRE SAFETY REGULATIONS

BASE VALCARTIER

COMMUNICATION SYSTEM

For operational and safety reasons, the Contractor must always be equipped with a communication system providing an ongoing link with Range Control for Ranges and Training Areas (RTA). Range Control has all the communication systems required to respond to any emergency, as described in the emergency plan. A mobile radio (Motorola HT 1250), the property of National Defence, will be loaned to the Contractor by NRCAN (the Contractor will be completely responsible for this equipment, however).

SAFETY AND EMERGENCY PLAN

2.1 On-site fire safety

- .1 The contractor shall ensure that the construction site's fire safety plan complies with the National Fire Code of Canada.

2.2 Fire safety briefing

- .1 After the award of the contract, the NRCAN Contract Representative will arrange a kickoff meeting. Prior to the commencement of work, the fire chief or the fire chief's designated representative, will brief the contractor on fire safety.

2.3 Reporting fires

- .1 Prior to the commencement of work, know the location of the nearest fire alarm box and emergency telephone, and memorize the emergency phone number.
 - .1 For business: 418-844-5000 ext. 5312;
 - .2 For emergency, fire or medical: 418-844-5333 (to be saved on cell phones) or 911 (internal phone).
 - .3 For all work outside of CFB Valcartier, the emergency number is 911.
- .2 Report immediately all fire incidents to the Fire Department as follows:
 - .1 Activate the nearest fire alarm box;
 - .2 When reporting by phone, specify the building name or number;
 - .3 Try to fight the fire without endangering your life;
 - .4 Evacuate the site;
 - .5 When firefighters arrive, convey the location and nature of the fire or medical emergency.
- .3 The person activating the fire alarm shall evacuate the site, report to firefighters when they arrive and direct them to the scene of the fire or accident.
- .4 The person phoning the firefighters shall specify the building name or number, and the fire location, and be prepared to confirm the information given.
- .5 The contractor shall inform the NRCAN Contract Representative and the fire chief of all fires reported on the construction site, regardless of their magnitude.
- .6 When reporting a fire by phone, specify the fire location of the fire and the building name or number and be prepared to verify the location.

2.4 Fire safety plan

- .1 Submit a construction site fire safety plan prior to commencement of work.

The fire safety plan shall comply with the National Fire Code of Canada.

- .2 The fire safety plan shall be submitted to the NRCAN Contract Representative for review by local fire department. The contractor shall take into account all comments by the local fire department.
- .3 The fire safety plan shall be limited to the area of construction only. The contractor is not responsible for amending fire safety plans in existing buildings.
- .4 Post the fire safety plan at the construction site entrance or near the on-site health and safety bulletin board.
- .5 The fire safety plan shall comply with the National Fire Code of Canada and cover the following:
 - .1 Fire emergency procedures, especially for:
 - .1 Activating the alarm;
 - .2 Reporting to the Fire Department;
 - .3 Instructing occupants on procedures after the fire alarm has been activated;
 - .4 Evacuating occupants, including special provisions for people needing assistance;
 - .5 Containing, controlling and extinguishing fires.
 - .2 Designating and preparing supervisory staff in charge of fire safety tasks.
 - .3 Training supervisory staff on fire safety tasks.
 - .4 Documents, especially charts, specifying the type, location and operation of building emergency systems that are triggered in the event of fire.
 - .5 Fire drills (if any).
 - .6 Fire hazard control inside a building.
 - .7 Inspection and maintenance of the facilities of the building to keep occupants safe.

2.5 Fire alarm system

- .1 A fire alarm must ring to notify construction staff that there is a fire on site.
- .2 The system must ring loud enough to be heard throughout a building.

2.6 Fire protection and alarm systems (interior and exterior)

- .1 Fire protection and alarm systems must not be:
 - .1 Obstructed;
 - .2 Shut-off;
 - .3 Left inactive at the end of a working day or shift, without prior written authorization from the fire chief.
- .2 Do not use fire hydrants, standpipe systems or hose stations for purposes other than firefighting, unless authorized by the fire chief.

2.7 Fire protection system impairment

- .1 Notify the NRCAN Contract Representative and fire chief at least 48 hours prior to shutting down and working on any fire protection system, including water supply, fire suppression and life safety systems.
- .2 Where a fire protection system that provides fire alarm monitoring is impaired in an existing building, a fire watch may be required at the fire chief's discretion.
- .3 Implement all fire protection system impairments in accordance with the National

Fire Code of Canada and the base's fire orders. Fire orders will be given to the contractor at the kickoff meeting.

2.8 Fire extinguishers

- .1 In addition to the other equipment required by these specifications and, as scaled by the fire chief, provide fire extinguishers necessary to protect work in progress and the contractor's physical facilities on site.
- .2 Fire extinguishers may be required at the following locations, as specified by the fire chief:
 - .1 Near hot works;
 - .2 In areas where combustible material is stored;
 - .3 Near or on any internal combustion engine;
 - .4 Near areas where flammable liquids or gases are stored or handled;
 - .5 Near temporary oil- or gas-fired devices;
 - .6 Near bitumen-binding equipment.
- .3 Fire extinguishers must be size 4-A:40-B:C (20 lb), unless the fire chief specifies otherwise.
- .4 Only dry chemical fire extinguishers shall be used, unless they are ill suited for the type of fire to be controlled.
- .5 The contractor may estimate the necessary quantity of fire extinguishers based on the required 75-foot maximum travel distance.

2.9 Access for firefighting

- .1 Access for firefighting shall be provided in accordance with the National Fire Code of Canada.
- .2 Advise the Fire Department of work that would impede fire apparatus response. This includes violation of minimum horizontal and overhead clearance, as prescribed by the fire chief, erecting of barricades and digging of trenches.
- .3 Minimum horizontal clearance: clear width of not less than 6 m or as defined by the fire chief.
- .4 Minimum vertical clearance: overhead height of not less than 6 m or as defined by the fire chief.

2.10 Smoking precautions

- .1 Smoking is prohibited in all buildings. Observe posted smoking restrictions near existing buildings.

2.11 Rubbish and waste materials

- .1 Keep rubbish and waste materials on the site at minimum quantities.
- .2 Burning of rubbish is prohibited.
- .3 Remove rubbish from work site at end of work day or shift or as directed.
- .4 Storage
 - .1 Store oily waste in approved receptacles to ensure maximum cleanliness and safety.
 - .2 Deposit greasy or oily rags and materials subject to spontaneous combustion

in approved receptacles and remove as specified.

2.12 Flammable and combustible liquids

- .1 Handle, store and use flammable and combustible liquids in accordance with the National Fire Code of Canada.
- .2 Keep flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Obtain written authorization from the fire chief for storage of quantities of flammable and combustible liquids exceeding 45 litres.
- .3 Do not transfer flammable or combustible liquids inside buildings or on jetties.
- .4 Do not transfer flammable or combustible liquids in the vicinity of open flames or any type of heat-producing devices.
- .5 Do not use flammable liquids having a flash point below 38°C, such as naphtha or gasoline, as solvents or cleaning agents.
- .6 Store flammable and combustible waste liquids, for disposal, in approved containers located in a safe ventilated area. Keep quantities to a minimum and notify the fire chief when disposal is required.

2.13 Hot works

- .1 The contractor shall implement a hot works program in accordance with the National Fire Code of Canada and the NFPA 51 Standard for Fire Prevention during Welding, Cutting and Other Hot Work.
- .2 The contractor shall obtain from the fire chief a "Hot Work" permit for all hot works on the construction site. Frequency of renewal for hot works permits is at the fire chief's discretion. When work is carried out in hazardous areas or using hazardous heat sources, provide fire watchers equipped with sufficient fire extinguishers. The fire chief must determine hazardous areas or sources, and the level of protection necessary for the fire watch.
- .3 Provide a fire watch service for work on the scale established and in conjunction with the fire chief as defined in the Fire Department briefing. Fire watchers shall be trained in the use of fire extinguishing equipment.
- .4 Area of hot works
 - .1 Hot works shall be carried out in an area free of combustible and flammable materials.
 - .2 Where 5.14 is not possible,
 - .1 All flammable and combustible materials within 15 m of the hot works shall be protected in accordance with the National Fire Code of Canada.
 - .2 A fire watch shall be on site during hot works, and for at least 60 minutes, unless otherwise directed by the fire chief.
 - .3 Make provision for a final inspection of the hot works area at least 4 hours after the completion of the hot works, unless otherwise directed by the fire chief.
 - .3 When sparks may potentially reach combustible materials located in areas adjacent to the hot work area:
 - .1 Cover or close up openings in walls, floors or ceilings so as to prevent

- sparks from reaching adjacent areas;
- .2 Implement item 5.14 in such areas.
- .5 Protection of flammable and combustible materials
 - .1 Any combustible or flammable material, dust or residue shall be:
 - .1 Removed from the area where hot works is carried out; or
 - .2 Protected from ignition by non-combustible materials.
- .6 Fire extinguisher
 - .1 A fire extinguisher shall be provided within 3 m of all hot works. Fire extinguisher minimum size shall be ABC (20 lb) unless otherwise directed by the fire chief.

2.14 Hazardous substances

- .1 Work entailing use of toxic or hazardous materials, chemicals or explosives, or otherwise creating a hazard to life, safety or health, shall be carried out in accordance with National Fire Code of Canada.
- .2 Provide ventilation where flammable liquids, such as lacquers or urethanes are used. Eliminate all sources of ignition. Inform the fire chief prior to and at completion of such work.

2.15 Questions and clarifications

- .1 Direct questions or clarification requests on fire safety to the NRCAN Contract Representative.
- .2 NRCAN is responsible for obtaining clarifications from the fire chief. The contractor is not to liaise directly with the fire chief for notification, authorization or any requests unless the situation constitutes an immediate emergency.

2.16 Fire inspection

- .1 Coordinate site inspections by the fire chief through the NRCAN Contract Representative.
- .2 Allow the fire chief unrestricted access to the work site.
- .3 Cooperate with the fire chief during routine fire safety inspections of the work site.
- .4 Immediately remedy unsafe fire situations observed by the fire chief.