



Fire Safety Plan For Construction, Renovation and Demolition Sites

Background Information

National Fire Code – Alberta Edition 2019:

National Fire Code- AE 2019, Division B, Section 5.6. requires a Fire Safety Plan for all construction, renovation and demolition sites.

Division B, Section 5.6:

This Section applies to Fire Safety for *buildings*, parts of *buildings*, facilities, adjacent buildings or facilities, and associated areas undergoing construction, alteration or demolition operations.

Division B, Section 5.6.1.3.(1):

Prior to the commencement of construction, alteration or demolition operations, a Fire Safety Plan, accepted in writing by the fire department and the *authority having jurisdiction*, shall be prepared for the site.

The Fire Safety Plan:

Will be **site specific** and may be reviewed at any time by the *authority having jurisdiction*. (High River Fire Department – Fire Safety Codes Officer). The Fire Safety Plan should be reviewed and updated as the construction site progresses. The Contractor, as a representative of the owner, is responsible for the Fire Safety Plan until occupancy.

The owner, developer or contractor responsible for a construction or demolition site is required to develop a Fire Safety Plan acceptable to an SCO Fire.

A Fire Safety Plan must address, in a manner acceptable to the SCO-Fire, all of the topics (applicable to the site) covered in each of the prescriptive Articles in Section 5.6 of the National Fire Code-AE 2019.

It is required that a Fire Safety Plan be accepted in writing by the Fire Department and the Authority Having Jurisdiction.

A Fire Safety Plan:

- Shall be submitted for review and acceptance.
- Shall be accepted prior to construction or demolition, including renovations.
- Must conform to the requirements of the National Fire Code- AE 2019.

For more information contact the High River Fire Department:

Phone Number: 403-652-3774

Fax: 403-652-3004

This information is being provided for the construction industry as an aid in preventing injury and fires in and around construction sites and to address life and property fire safety issues. Keeping in mind it is the **sole responsibility of the owner** or representatives of the owner to:

- be aware of all regulations within the jurisdiction.
- carry out or make provision to adhere to the various codes and standards applicable to their project or business.

High River Fire Department

Fire Safety Plan

A Fire Safety Plan should include, but is not limited to the following information. Please check off all applicable provisions and provide additional detail where required for your site-specific Fire Safety Plan.

All applicable provisions must be adhered to. Construction sites may be inspected for compliance at any stage of construction. The accepted Fire Safety Plan shall be posted on site.

Building Name/Site Address:

Description of Project:

1. Emergency Procedures to be used in THE EVENT OF AN EMERGENCY
A building under construction, without functional fire protection equipment is at its most vulnerable stage, therefore it is imperative to initiate emergency response at the earliest possible opportunity.

What are your provisions for initiating emergency evacuation procedures on this site and how will you notify emergency responders (i.e., sounding of air horn 3 blasts, activating fire alarm, calling 911?)

Provide a list of instructions for site personnel to follow when an alarm is sounded:

Exit routes are provided with clearly identified signage to indicate egress from floor areas/building.

Designated gathering location (muster point) will be off site with signage.
Location:

List of personnel on site, updated and current – you should know who is on site.

Person assigned to meet the fire department and give information such as:

- Where is the fire or injury located on site
- Is everybody on site accounted for

Name of person responsible:

Assigned site fire warden(s), various trades represented.

Directions and training for confining, controlling and extinguishing the fire:

2. Training of site personnel on evacuation procedures including:

Site orientation (familiarize on site personnel visitors on emergency procedures.)

Name of person responsible:

Regular site fire safety meetings incorporated into regular safety meetings.

Simulated fire drills as applicable and warranted.

3. Assigned site personnel responsible for fire prevention activities such as:

Control of combustibles on the site and around the buildings including removal of excess garbage materials on a regular basis and general housekeeping.

Name of person responsible:

Maintain separation of combustibles from open flame devices.

Name of person responsible:

Ensure that combustible hoarding is secured to prevent contact with the heaters.

Name of person responsible:

Maintain clear unobstructed access for fire department apparatus to building(s) and to fire fighting services such as hydrants and fire department connections i.e. sprinkler and/or standpipes/Dry Hydrant Connections

Name of person responsible:

Parking of vehicles or delivery trucks, directed so as not to obstruct fire department access to the site and buildings. (Off site parking and storage may be considered.)

Name of person responsible:

Maintenance and operation of at least one exit from every floor.

Name of person responsible:

Smoking shall not be permitted in areas where conditions are hazardous or potential of ignition exists.

4. Fire Fighting Services – Unobstructed hydrant, Siamese, sprinkler, temporary access route, standpipe.

Check all applicable fire fighting services that are installed, tested and activated at the start of construction. These must be maintained and accessible for fire fighters at all times.

Hydrants (maintain 2 metre access around hydrants)

Standpipes (existing)

Siamese connections

Emergency access routes:

Submit drawings showing location of fire fighting systems such as:

- Hydrants
- Fire Department Connections (Siamese and/or standpipe)
- Muster point
- Access to building primary and secondary access points

The site is properly addressed and the sign is visible and legible to the emergency crews.

An all weather road shall be constructed prior to project commencement and must meet the provisions outlined in Standata FC10901 Water Supplies and Access for Fire Fighting. This road must be designed to support the expected loads imposed by firefighting equipment (38,500 kg) and have a clear width not less than 6 metres.

5. Fire Extinguishers:

Provide sufficient numbers and sizes. (2A:10B:C on moveable equipment and 4A:40B:C in all other locations.)

Serviced and tagged by a certified agency, within the last year.

Service date:

Mounted, with proper signage, where workers are present and at exit locations on every level, and meet the required travel distance between extinguishers (75 feet or 22.86 m.)

At or near gas or propane fuel operated equipment.

At or near areas where combustibles are stored.

Adjacent to any hot works operations.

6. Hot Works Operations:

Does your scope of work require Hot Works Operations?

Yes

No

If "Yes" Please check all applicable provisions:

Definition: The burning, welding, heating of a material, or a similar operation that is capable of initiating fires or explosions including, but not limited to, cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing or membrane adhesive bonding, or any other similar heat producing activity.

The area shall be clear of flammable and combustible materials.

Fire watch assigned during hot works operation and for a period not less than 60 minutes after its completion.

A final inspection of the hot works area shall be conducted 4 hours after completion of work.

If hot works are in the proximity of combustible or flammable contents, provisions have been made for the protection of such contents by non-combustible materials, thermal barrier or other means.

Work being performed by trained or certified personnel.

A fire extinguisher (4A:40B:C) is present at all times.

Proper ventilation, as required.

If hot tar pots are on site, provide fire extinguishers. Hot tar pots must only be used by trained personnel and located away from combustible materials.

7. Flammable/Combustible Liquid and Compressed Gas Storage

Does your scope of work require the storage of flammable/combustible liquids or compressed gases?

Yes **No**

If "Yes", all provisions below are applicable:

Storage area separated from combustible material by 3m.

Storage area locked and vented.

Storage area protected from vehicular/industrial motorized traffic.

Portable pressurized (full or empty) cylinders secured when not in use.

Area to have proper signage or placards in place.

A current list of dangerous goods on site.

A portable 4A:40B:C fire extinguisher in close proximity to storage and work areas.

Storage area away from egress and access routes to the site.

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8. Security

What are your provisions for site security when workers are absent from the site?

9. Contact Personnel:

Provide a list of names and telephone numbers of persons to be contacted during non-operating hours or in emergency situations to be posted on site.

In addition to the above, please check off all of the following provisions that may be relevant to your scope of work:

National Fire Code- AE 2019 (NFC-AE) Section 5.6 Construction and Demolition Sites.

Will any part of this building continue to be occupied during construction, alteration or demolition operations?

Yes **No**

If "Yes", refer to the following code requirements and describe how these provisions will be met.

NFC-AE 5.6.1.12.(1) Fire Separations in Partly Occupied Buildings

Where part of a *building* continues to be occupied, the occupied part shall be separated from the part being demolished or constructed by a *fire separation* having a *fire resistance rating* of not less than 1 h.

NFC-AE 5.6.1.21.(3) Occupied Buildings

Required *exits* from the occupied area shall be maintained or alternate *means of egress* shall be provided.

For Alteration, Construction of an addition or Demolition operations:
Is the existing building protected by a Fire Alarm System, Sprinkler System, or Standpipe System?

Yes **No**

If "Yes", refer to the following code requirements and describe how these provisions will be met.

NFC-AE 5.6.1.13. Protection during Shutdown

1) Except as permitted in Sentence (2), where a fire protection system is provided, it shall remain operational throughout the construction, alteration or demolition area where reasonably practical.

2) When any portion of a fire protection system is temporarily shut down during construction, alteration or demolition operations, protection during shutdown shall comply with Article 6.1.1.4.

NFC-AE 6.1.1.4 Protection during Shutdown

1) When any portion of a fire protection system is temporarily shut down, alternative measures shall be taken to ensure that protection is maintained.

NFC-AE 5.6.1.14. Watch

1) A watch, with tours at intervals of not more than 1 h, shall be provided throughout demolition sites when there are occupants in the portion of the *building* not being demolished.

2) Except where a *building* is provided with a fire alarm system or similar equipment, a watch, with tours at intervals of not more than 1 h, shall be provided when a portion of the *building* is occupied while construction operations are taking place.

3) Facilities shall be provided to enable the watcher referred to in Sentences (1) and (2) to
a) ensure a fire warning is sounded to notify occupants, and
b) communicate with fire department.

Does your scope of work require a standpipe system?

Yes

No

If yes, refer to the following code requirements and describe how these provisions will be met.

NFC-AE 5.6.1.6. Standpipe Systems

1) Where a standpipe system is to be installed in a *building* under construction or alteration, the system shall be installed progressively in conformance with Subsection 3.2.5. of Division B of the NBC-AE 2019 in areas permitted to be occupied.

2) Where a standpipe system is to be installed in portions of a *building* under construction or alteration that are not occupied, the following shall apply:

a.) a permanent or temporary standpipe system is permitted in accordance with clauses (b) and (c),

b.) the standpipe system shall be provided with conspicuously marked and readily accessible fire department connections on the outside of the *building* at *street* level and shall have at least one hose outlet at each floor,

c.) the pipe size, hose valves and water supply shall conform to Subsection 3.2.5. of Division B of the NBC-AE,

d.) the standpipe system shall, as a minimum, be securely supported and restrained on alternate floors,

e.) at least one hose valve for attaching fire department hose shall be provided at each intermediate landing or floor level in the *exit* stairway, f.) valves shall be kept closed at all times and guarded against mechanical damage,

g.) the standpipe shall not be more than one floor below the highest forms, staging, and similar combustible elements at all times, and

h.) temporary standpipe systems shall remain in service until the permanent standpipe installation is complete.

3) Where a *building* being demolished floor by floor is equipped with a standpipe system, the system, together with fire department connections and valves, shall be maintained in operable condition on all *storeys* below the one being demolished, except for the *storey* immediately below it.

Does your scope of work require a temporary fuel tank?

Yes **No**

If "Yes", refer to the following code requirement for the installation of fuel tanks:

NFC-AE Div. C 2.2.3.1.(2) Storage Tank Systems

2)...no person shall install or alter any storage tank systems referred to in Part 4, unless,
a) required permits or approvals have been obtained from the *authority having jurisdiction*
You are required to apply for and obtain a fuel tank permit prior to installation by contacting
Petroleum Tank Management Association of Alberta. 1-866-222-8265 or www.ptmaa.ab.ca

This Fire Safety Plan has been designed and submitted by:

Name:

Phone number:

Email:

Approved by: (Name/SCO#):

Signature of Safety Codes Officer:

Date of Approval: