



CONSTRUCTION FIRE SAFETY PLAN GUIDELINES

A Construction Fire Safety Plan (CFSP) is a document that contains written procedures to address the following objectives: the protection of life and property, emergency procedures and fire hazard control. A CFSP is required for all buildings or portions of buildings prior to the commencement of construction, alteration or demolition operations on a construction site and shall be submitted to the District of North Vancouver Fire and Rescue Services (DNVFRS) in PDF format for review and approval. CFSPs are required to comply with the BC Fire Code (BCFC) Sections 2.8 and 5.6, the BC Building Code (BCBC) Part 8 and the District of North Vancouver Fire Bylaw 8762.

OCCUPANCIES REQUIRING A CFSP IN THE DISTRICT OF NORTH VANCOUVER (DNV)

- Residential occupancies greater than a triplex
- Part 3 single family dwellings
- New commercial occupancies
- New multi residential occupancies
- Any base building work on multi residential or commercial occupancies
- And new Group F or demolition Group F (Industrial Occupancy)

Once accepted, a reference copy of the CFSP will be kept by the DNVFRS, and one copy will be posted in the site construction office. The plan shall be ***SITE SPECIFIC*** and may be phased depending on your construction project, i.e. demolition, excavation, and shoring. CFSPs may be reviewed at any time by the authority having jurisdiction. As construction progresses, the plan must be periodically updated. This shall be done by the General Contractor as representative of the owner and in consultation with the DNVFRS.

A professionally prepared report, in compliance with Article 5.6.1.2 of the current B.C. Fire Code must accompany a building permit application. Mitigation measures must be in place before construction begins above grade (or as noted in the report). A CFSP is a living document which may be required to be revised and/or updated over the course of the project.

Please ensure to include the name and email address for the Owners Agent for the project, on the title page.

CONSTRUCTION FIRE SAFETY PLAN GENERAL GUIDELINES

- CFSP binder will be red in colour and the wording '**CONSTRUCTION FIRE SAFETY PLAN**' on the front and spine of the binder in white lettering.
- CFSP will be kept in a standard 8.5" x 11", 3 ring binder.

- Site address and Building permit number (if applicable) is to be displayed in large font on the front of the binder.
- A large site plan is required to be posted at all emergency access entry points.
- Include a cover page with the name, address and colored pictures of the site and key features, date prepared and any revision date(s).
- Upon review and acceptance, the DNVFRS will issue a letter or email of acceptance (***this acceptance letter/email shall be placed in front of the Construction Fire Safety Plan binder***).

FORMAT & TEXT

- All drawings, forms, checklists, and reports shall be single-sided.
- All text shall be in Arial font, minimum font size of 12pt throughout the Construction Fire Safety Plan.
- Headings: Font size shall be a minimum of 14pt throughout the Construction Fire Safety Plan.
- All drawings Must be printed on 11" x 17", coloured, landscape format single sided
- Refer to DNVFRS Plan Drawings Symbols

CONSTRUCTION FIRE SAFETY PLAN BINDER CONTENT

All Construction Fire Safety Plan Binders are to be site / building specific.

- Table of Contents
- Section 1 - Fire Department Information
- Section 2 - Introduction, Scope and Purpose
- Section 3 - Appointment of Supervisory Staff
- Section 4 - Responsibilities of Supervisory Staff
- Section 5 - Procedures to Be Used in Case of Emergency
- Section 6 - Training of site personnel on evacuation procedures
- Section 7 - Site Diagrams
- Section 8 - Hot Works (also see BCFC Section 5.2)
- Section 9- Fire Watch
- Section 10 - Propane Storage and Flammable/Combustible Storage
- Section 11- Additional Information and Forms (as per DNVFRS requirements)

Section 1 - Fire Department Information

- Fire Safety Director contact Info
- Deputy Fire Safety Director contact info
- Main emergency contact (highlighted in yellow)
- Emergency Phone numbers
 - RCMP
 - BC Ambulance
 - Poison Control
 - BC Hydro

- Fortis BC
- Haz mat
- Nearest Hospital
- Etc.
- Site and Contractor Contacts
- Building description and safety features
- Arial View of project including
 - FD Access
 - Site Shutoffs (Gas/Elec/Water)

Section 2 - Introduction, Scope and Purpose

- What is the scope of the project
 - Expected timeline
 - Phases of construction?

Section 3 - Appointment of Supervisory Staff

- Security
 - What type of security is provided (locked gate, monitored alarm, CCTV, 24-hour security guard)
 - Role of security personnel
 - 24-Hour contact information for security personnel
 - Security personnel to have access keys to all areas
- Training of supervisory staff
 - Who is responsible for ensuring that supervisory staff know their responsibilities

Section 4 - Responsibilities of Supervisory Staff

- Compliance of the site with the CFSP
- BCFC 5.6.1.2 “Protection of Adjacent Building” measures over and above what is identified in the Fire Safety Plan are to be incorporated into the construction site safety procedures
- Shipping containers on site to have additional ventilation and signage as per DNV Fire Bylaw 8511.
- Control of fire hazards and fire safety around the site
 - Combustibles around site and buildings
 - General housekeeping
 - Removing excess pallets, garbage/waste (also as per BCBC 8.2.5)
 - Securing temporary enclosures (tarps) from being blown against ignition sources
 - Separation of combustibles from open flame devices and ignition sources in conformance with BCBC Part 6
 - Termination of services during demolition to comply with BCFC 5.6.1.9, and the BC Electrical Code
 - Fuel supply installations to comply with BCFC 5.6.1.10 and CAN/CSA B139-M and the BC Gas Safety Regulation

- Tank, Piping and Machinery Reservoir at demolition sites shall be in conformance with BCFC 4.3.16 and 5.6.1.11.
- A 1-hour fire separation is required between construction activities and occupied portions of the building
- Maintaining Fire Department Access and Firefighting Services
 - Site address sign visible from street and up to date with emergency contact information
 - Access route to fire hydrant and fire department connection
 - Access onto site
 - Delivery vehicle parking
 - Standpipe installation:
 - Installed in conformance with BCBC 3.2.5. and BCFC 5.6.1.6
 - Active not more than one floor below the highest forms, staging and similar combustible elements at all times
 - Accessible on all floor levels
 - Wet unless there is a threat of freezing
 - Procedure to ensure reactivation when taken offline
 - Access to water valve if system dry (threat of freezing)
 - Provide signage when system not charged
 - Sprinkler installation as soon as practicable
 - Building systems are available for firefighter access (construction elevator, stairs, etc.)
- Posting of emergency procedures
- Designating and maintaining at least one exit from floor area
 - No storage of combustibles in exit route, stairs
- Inspection and maintenance of building facilities, systems, equipment and devices
- Fire separations activated once installed (door closed/latched at end of construction day)
- In occupied buildings:
 - Fire separations to be made safe by the end of the construction
 - Life safety systems taken offline procedures (notification of occupants, fire watch)

Section 5 - Procedures to Be Used in Case of Emergency

- Designated and backup person responsible for sounding the alarm and calling 9-1-1
- Are there different horn sounds for different emergencies
- Procedures in the event of a fire
 - Sounding the fire alarm
 - Activating the fire alarm in occupied buildings
 - Sounding the horn for construction sites (description of blast alert)
 - Evacuating occupants
 - Confining, controlling, and extinguishing the fire if trained and safe to do so
 - Evacuating to Muster Area

- o Accounting for site personnel
- Meeting the fire department

Section 6 - Training of site personnel on evacuation procedures

- Site orientation
- Site fire safety meetings
- Holding of fire drills
- Maintaining a list of on-site personnel and their emergency training
- Training of site personnel for what to do in an emergency, muster location, use of fire extinguisher, site fire wardens/trade representatives
- Smoking restrictions

Section 7 - Site Diagrams/Plans

Site Diagrams to include

- Hydrants
- FD connections to standpipes or sprinklers
- Site Trailer
- Safety Office
- First Aid Station
- Fire Department Access Route (Including primary access points)
- Location of large site map (located at all FD access points)
- Electrical/Gas services locations/shutoffs
- Temporary Electrical Shed
- Hoarding and fencing
- Propane and flammable/combustibles storage locations
- Muster Point(s)
- Fuel Storage Areas/Shipping Containers (see requirements)
- Crane Location(s) Radius (***all cranes on the construction site must be registered with THARP***)
- Sediment Control Tanks

Floor Plans to include

- Exit paths/stairs
- Standpipe locations
- Isolation valves
- Location of fire protection equipment
- Building services

Fire extinguisher locations

- Emergency locations
- Fuel operated equipment
- Combustible storage locations
- Flammable/combustible and propane storage

- Adjacent to hot works
- Minimum 3A20BC on movable equipment
- Minimum 4A40BC in all other locations

Section 8 - Hot Works (also see BCFC Section 5.2)

- Area clear of flammable and combustible materials and protection if required
- Assigned fire watch during and for 60 minutes after completion
- Final inspection 4 hours after completion
- Trained/certified personnel
- Hot works permit
- Fire extinguisher
- Proper ventilation

Section 9 - Fire Watch

- Hot Works
- Impairments to fire separations and life safety systems (fire alarm, sprinkler system)
- Tours at intervals not more than 1 hour
- Capable of sounding a warning to notify site personnel/occupants and call 911

Section 10 - Propane Storage and Flammable/Combustible Storage

- Located away from egress and access routes
- Storage, handling and use (also see BCFC Part 3, 4, and 5)
- Separation from combustibles by 3 meters
- Storage area locked and vented
- Propane use and storage (no storage of propane in building)
- If you use a shipping container, you must have additional ventilation and signage as per DNV Fire Bylaw 8511.
- Safety data sheet location
- Portable extinguishers

Section 11- Additional Information and Forms (as per DNVFRS requirements)

Appendix

- Protection of Adjacent Building” report relative to Article 5.6.1.2 of the B.C. Fire Code 2018. Describe in detail measures over and above what has been identified in this Construction Fire Safety Plan that will be incorporated into the construction site safety procedures:
 - To be prepared by a registered professional
 - Include a risk analysis
 - Identify neighbouring properties at risk (construction type, life safety systems, distances)
- Proposed mitigating measures
- Signed and sealed by registered professional
- Exposure Hazard Assessment Report

ADDITIONAL INFORMATION AND FORMS

- Copy of the DNVFRS Shipping Container Requirements
See [DNVFRS - Shipping Container Requirements.docx](#)
- Copy of the DNVFRS Fire Watch Information (if required)
See [DNVFRS - Fire Watch Information.docx](#)

IMPORTANT NOTES

- Plans for review **MUST** be submitted to firesafetyplans@dnv.org
- *The methods identified in this special report to protect adjacent buildings should be identified and implemented at the appropriate stages of construction.*