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Bulletin 12-11

Special Event Temporary Facilities, Concessions & Rides

The City of Saskatoon during the summer months is home to many events and festivals. With the advent of large crowds taking part in these special events, Saskatoon Fire Department has engaged in a proactive approach to all special events within our city. Saskatoon Fire Department - Prevention & Investigation Division will be performing basic fire inspections of these temporary facilities, structures, concessions, rides, trailers and the event sites. This basic fire inspection of these facilities and temporary venues is a preventative measure that attempts to ensure the events safety for the participants and the general public. This in turn greatly reduces the possibility of a large-scale problem if a fire or unforeseen emergency occurs. Saskatoon Fire Department key objective is to ensure that basic fire safety and life safety requirements are met. This document is a condensed version of the codes and bylaws being enforced in the City of Saskatoon. Ultimately it is the responsibility of the owner to ensure conformance to all applicable codes and bylaws.

Code reference abbreviations: National Fire Code of Canada, NFC National Building Code of Canada, NBC National Fire Protection Association - NFPA

The following must be met so that fire code and life safety concerns are met:

1. Requirements for Trailers (Semi Trailers)

- All trailers (semi trailers) which have living quarters attached must have a minimum of a 2-A, 10-B, C type portable fire extinguisher mounted conspicuously and the portable fire extinguisher must have had an annual test by a qualified technician. These extinguishers must be kept in plain view and attached to a surface with the appropriate brackets.
- All other trailers without living quarters attached must meet the minimum requirements as set out in NFPA 10 "Portable Fire Extinguishers" and National Fire Code of Canada. They also must be mounted conspicuously to a surface with an appropriate bracket.
- Fuel shall be stored such that it is not within the immediate area of persons working with open flame devices or grinding tools.
- Fuel containers shall have caps in place unless transferring.
- Absolutely no smoking allowed in areas designated for flammable liquids.

• All flammable liquids shall be stored in one central location within your designated pit site. They shall be stored in such a way that they are visible and if persons are residing within the trailer shall not be kept within the trailer.

2. Requirements for Portable Fire Extinguishers

- Portable fire extinguishers shall be selected and installed in conformance with NFPA 10, "Portable Fire Extinguishers" and the National Fire Code of Canada. (NFC 2.1.5.1. and 6.2.1.1.(1).)
- Portable fire extinguishers shall be inspected, tested and maintained in conformance with NFPA 10, "Portable Fire Extinguishers"
- Portable fire extinguishers shall be maintained by a qualified technician at intervals not more than one year. (NFPA 10 4-1.2(3), NFPA 10 4-4.1)
- Portable fire extinguishers shall be conspicuously mounted where they will be readily accessible and immediately available, preferably along normal paths of travel including exits from areas. (NFPA 10 1-6.3)
- All concessions, temporary structures, tents and other buildings with an electrical service shall have a minimum 2-A,10-B,C portable fire extinguisher on site.
- All portable hotdog carts, barbeques and other heat producing food equipment shall have a minimum 2-A,10-B,C portable fire extinguisher on site.
- In addition, a portable fire extinguisher with a minimum rating of 5-B,C shall be located on the serving cart or table where flaming meals and drinks are being served.

3. Requirements for Class 2 Flammable Compressed Gas Cylinders

- All Class 2 flammable compressed gas cylinders shall be firmly secured to protect the cylinder from valve damage and falling over.
- Cylinders shall not be stored in an exit or access to exit.
- Propane cylinders shall not be stored inside any concession, temporary structure or tent, trailer or other building.
- Propane cylinders shall be stored in a secured outdoor location or fenced enclosure.

4. Requirements for Cooking Equipment used in Processes Producing Smoke or Grease-Laden Vapours (NFC 6.6.1.1.)

- Concession hood, duct and fire suppression systems must be in conformance with NFPA 96 and meet the UL 300 Standard for Commercial Cooking.
- All Cooking Appliances must be covered by the Hood and Fire Suppression system and installed to the manufactures specifications.
- All hoods, ducts and filters must be cleaned on a regular basis so as not to allow a grease build-up.
- The fire suppression system must be serviced by a qualified technician every 6 months.
- Commercial cooking exhaust systems must be cleaned by qualified technician.
- A tamper seal must be intact and a current dated service tag displayed prominently on the pull station.
- The system must be interconnect to an electrical contact and fuel shut off, so if the system is discharged the gas valve will close and the electricity to the appliances will be shut off.

- Appliance shall have a clearance of 450mm (18") from combustible materials.
- A Class K portable fire extinguisher shall be located in the cooking area with a tamper seal intact and a current dated tab must be prominently displayed on the fire extinguisher.
- All compressed gas cylinders shall be firmly secured to protect the cylinder from valve damage and from falling over. Cylinders shall not be stored in an exit or access to exit.
- Emergency contact names and numbers shall be supplied.
- Staff shall be trained on the operation of the Fire Suppression System, the use of the fire extinguisher and the fire safety plan.

5. Requirements for Open Flames (NFC 2.4.3. and NFC 2.9.3.3.)

- Open flames whose quantity and method of use create a fire hazard shall not be permitted in processions within assembly occupancies.
- Flaming meals or drinks shall be ignited only at the location of service.
- Refuelling of equipment used for flaming meals or drinks or for warming food shall be carried out outside the serving area, and away from ignition sources.
- In addition, a portable fire extinguisher with a minimum rating of 5-B,C shall be located on the serving cart or table where flaming meals and drinks are being served.
- Devices having open flames shall be securely supported in non-combustible holders and shall be located or protected so as to prevent accidental contact of the flame with combustible materials.
- Smoking shall not be permitted in a tent or air-supported structure while it is occupied by the public.
- Portable warming devices (hot holding equipment) are permitted to be used as per manufacturer's instructions.

6. Requirements for Extension Cords (NFC 2.4.7.1. and CEC)

- Extension cords shall be used in conformance with the Canadian Electrical Code.
- Extension cords shall be of proper gauge for the intended use.
- Extension cords shall be used so as not to create a tripping hazard nor impede any means of egress.

7. Requirements for Emergency Planning (NFC 2.8.1.1.)

- All staff members shall be instructed in emergency planning including:
 - Locations of exits, fire extinguishers, gas shut off valves, fire extinguishing system manual activation devices
 - Usage of fire extinguishers, fire extinguishing system manual activation devices, gas shut off valves
 - Procedures to be followed in case of an emergency
 - Instructions to be given to the public in case of an emergency
 - Emergency notifications ie: calling 911
- Emergency contact numbers shall be posted

8. Requirements for Flammable or Combustible Liquids (NFC 2.4.4.)

- Empty containers should be used for display purposes.
- The amount of flammable/combustible liquids, for an entire "fire compartment" shall not exceed the incidental use, as described in the National Fire Code of Canada.
- MSDS information shall accompany all flammable/combustible materials displayed.
- Propane and other similar products shall not exceed a maximum cylinder size of 5 pounds. The cylinder must be removed from the structure when not attended.

9. Requirements for Seating Arrangements and Exits – Outdoor Assemblies (NFC 2.7., NBC 3.3.2.10., NBC 3.4.2.1. and NBC 3.4.3.4.)

- Exit requirements for each tier or balcony:
 - Capacity of more than 4000 persons minimum of 4 separate exits
 - Capacity of more than 1000 persons minimum of 3 separate exits
 - All other areas minimum of 2 separate exits
 - Exception: For an area with a capacity of not more than 60 persons which has a maximum floor area of $150m^2$ and a maximum travel distance of 15m to an exit, a single exit is permitted.
- Exits from outdoor stadia or grandstands shall be located not more than 25m apart.
- Travel distance from every seat to the ground, an exit or access to an exit, shall not exceed 45m.
- Aisles shall be located so that there are not more than 20 seats between any seat and the aisle, shall be not less than 1200mm wide (an aisle serving less than 60 persons is permitted to be 750mm wide) and shall not have steps unless the slope of the aisle is more than 1 in 8.
- Steps provided in an aisle shall extend the full width of the aisle, have risers not more than 230mm high, and have treads with a run not less than 250mm.
- The required width of means of egress shall be determined by multiplying the occupant load of the area served by:
 - 1.8mm per person for aisles, stairs other than exit stairs, and ramps and passageways in dormitories and exits, and
 - 2.4mm per person for exit stairs.

10. Requirements for Tents and Air-Supported Structures (NFC 2.9. and NBC 3.1.6.)

- Tents and air-supported structures shall be in conformance with the National Building Code of Canada.
- Flame retardant treatments shall be renewed as often as required to ensure that the material will pass the match flame test in NFPA 701, "Fire Tests for Flame-Resistant Textiles and Films." (Tag shall be affixed to the tent.)
- Electrical systems in a tent or air-supported structure shall be maintained and operated in a safe manner. Portable electrical systems shall be inspected for fire hazards and defects shall be corrected before the tent or air-supported structure is occupied by the public. The electrical system and equipment in a tent or air-supported structure, including electrical fuses and switches, shall be inaccessible to the public.
- Cables on the ground in areas used by the public in a tent or air-supported structure shall be placed in trenches or protected by covers to prevent damage from traffic.

- Hay, straw, shavings or similar combustible materials other than necessary for the daily feeding and care of animals shall not be permitted within a tent or air-supported structure used for public occupancy, except that sawdust and shavings are permitted to be used if kept damp.
- Smoking and open flame devices shall not be permitted in a tent or air-supported structure while it is occupied by the public.
- An air-supported structure shall be designed as open floor space without interior walls, mezzanines, intermediate floors or similar construction.
- Tents and air-supported structures shall be a minimum of 3m from other structures and shall be a sufficient distance from one another to provide a means of emergency egress.
- Tents of not more than 120m² in ground area, located in open spaces may be located less than 3m from one another provided this does not create a hazard to the public.
- The ground enclosed by a tent or air-supported structure and for not less than 3m outside the structure shall be cleared of all flammable material or vegetation that will spread fire.
- Every tent and air-supported structure and all tarpaulins and decorative materials used in connection with these structures shall conform to CAN/ULC S109-M, "Flame Tests of Flame-Resistant Fabrics and Films."
- For number of required exits see section on requirements for seating arrangements and exits.

11. Requirements for Vehicles within a Structure

- Fuel tanks shall be locked or have a locked fuel cap installed at all times.
- Recommend batteries are disconnected
- Propane fuelled vehicles shall have the tank permanently mounted, the fuel system shall be equipped with an automatic stop-fill valve, and the fuel cut-off valve shall be closed.

CHECKLIST

General Requirements

- Portable fire extinguisher installed and maintained:
- Flammable or Combustible liquids properly stored:
- **MSDS** information on site:
- Compressed gas cylinders firmly secured:
- **Propane cylinders** stored appropriately outside:
- **Combustible Materials** removed from structures or conform to CAN/ULC S109-M
- **Emergency lighting** installed and tested:
- **Extension Cords** meet requirements:
- Emergency contacts posted:
- Staff trained in **Emergency Procedures**:
- Vehicles have locking fuel caps in place:
- **Propane fuelled vehicles** maintained as per Code:

Requirements for Cooking Equipment

- Hood & fire suppression system installed to Code:
- Fire suppression system serviced:
- Tamper seal & tags in place:
- Combustible clearance maintained:
- Class K portable fire extinguisher installed & maintained:
- Staff trained on use of fire suppression system & portable fire extinguisher:
- Open flame devices secured:

Requirements for Seating Arrangements and Exits

- Required exits marked and clear of obstructions:
- Required aisles maintained and clear of obstructions:

Requirements for Tents and Air-supported Structures

- Structure located with required exterior clearances:
- Structure constructed of flame-resistant material as per Code:
- Cables and electrical equipment installed and maintained to Code:
- Combustible materials removed:
- Required exits are maintained: