Regional Meeting
2017

Fire

Alberta Municipal Affairs
Fire Extinguishers
Safety Officials/OHS

Construction Education with the Safety Officer and the Fire SCO
Fire Extinguishers on Vehicles

What are the requirements for portable Extinguishers on Vehicles?

The Alberta Fire Code sets out requirements for regulating portable extinguishers. The Code requires extinguishers to be located inside buildings with the exception of a few outdoor locations like service stations, lumber plants and bulk plants. The Code also requires extinguishers to be located on a "tank vehicle." A tank vehicle means any vehicle, other than railroad tank cars and boats, with a cargo tank having a capacity of more than 450 L, mounted or built as an integral part of the vehicle and used for the transportation of flammable liquids or combustible liquids and including tank trucks, trailers and semi-trailers.

The Fire Code does not regulate portable extinguishers used in vehicles, trucks, pick-up trucks, buses or any other service vehicle, however portable extinguishers may be required in the vehicles listed by other Federal or Provincial legislation.

Alberta Commercial Vehicle Safety Regulation

STANDATA FCB-09-04
Fire Extinguishers – location on construction sites

• Fire extinguishers will be available at all times at every site while workers are present

STANDATA Interpretation FCI-09-03
STANDATA Update

• The following are being reviewed by FSC and revised by Municipal Affairs:
  – Fencing of Aboveground Storage Tanks at Card-or Key-Activated Dispensing Facilities
  – Existing FAS
  – Secondary Suites
  – Water Supplies and Access for FF
  – Existing Elevator Modernization/Fire Alarm Interface
  – Use of Containers, Portable Tanks and Transportation Tanks for the Ongoing Storage and Dispensing of Flammable and Combustible Liquids
  – Fixed Fire Suppression & Exhaust Systems – Cooking
  – Sale and Use of Flying or Sky Lanterns
  – Protection of Adjacent Buildings
  – Fixed Fire Suppression Systems – Non-cooking
STANDATA Update

- The following are on hold for revisions but are still in effect and can be used by SCOs:
  - Approval of Individuals for Aboveground Tank Installations
  - Used Oil Indoor Storage Tank(s) Supplying Used-Oil Fuel Burning Appliances
  - Low-Hazard Fireworks (Permits, Storage and Display and Enforcement)

The hold on revision for the first two is only to determine with Codes Canada how to incorporate the new B139 into the Fire Code.

For low-hazard fireworks we are continuing discussions as to whether what is really a noise and nuisance problem belongs in the Alberta Fire Code as it does not sit in any other provincial Fire Code.
STANDATA Update

• The following are being rewritten:
  - Installation of Fire Extinguishers on vehicles
  - Inspection, Maintenance & Recharging of Portable Fire Extinguishers
  - Portable Fire Extinguisher Servicing
  - Occupant Load

Note:
• A Mobile Cooking Operations Interpretation has been developed by AMA and will be reviewed by the Fire, Building, Electrical, Gas and Plumbing Sub councils.
• AMA is currently developing Province Wide Alternative Solution (Variance) to ensure that existing anti-freeze zones in sprinkler systems remain with the design anti-freeze concentration. New systems under the ABC 2014 will require dry pipe zones rather than antifreeze zones.
S.A.F.E. Registry

Systems
And
Fire
Equipment
S.A.F.E.

- Systems and Fire Equipment Registry (S.A.F.E.) was requested by the Fire Sub council in 2013 at the suggestion of the Alberta Fire Safety Association.
- Was suggested that it be initially voluntary with the intent to make it mandatory in the future.
- Plans are to require every qualified fire extinguisher technician (and certified shop), exhaust cleaner, fixed system technician, fire alarm technician, qualified electrician and sprinkler fitter in the registry.
- If made mandatory this would provide both an awareness tool for owners and an enforcement tool for SCOs.
Organizational Scope

Municipal Affairs
Safety Codes Council
Office of the Fire Commissioner
Community and Technical Support

• Office of the Fire Commissioner
  (Spence Sample)

• Fire, Building, Accessibility and Energy Standards Development and Support
  (James Orr)

• Mechanical Standards Development and Support
  (Harry Li)
  • Electrical
  • Gas (Natural and Propane)
  • Plumbing
  • Private Sewage
  • Boilers and Pressure Vessels
  • Elevators
  • Amusement Rides
  • Passenger Ropeways
Strategic and System Support

- **Compliance and Assurance**
  - Compliance (including Administrative Penalties)
  - Partnership Support
  - New Home Buyer Protection Program
  - Builder Licensing

- **Certification and Analytics**
  - Fire and SAR Certification
  - Incident Reporting and Data Analysis

- **Policy and Research**
  - Policy, Planning and Stakeholder Services
  - Business Services
Municipal Affairs

- Municipal Assessment and Grants
  - Assessment Audit
  - Linear Property Assessment
  - Assessment and Property Tax Policy
  - Municipal Grant Program Delivery
  - Federal Grant Program Delivery
  - Grant Accountability
  - Tax Program Delivery
Municipal Affairs

- **Municipal Services and Legislation**
  - Major Legislative Projects Unit
  - MGA Review
  - Regional Recovery Coordination Group
  - Strategic Planning and Program Integration
    - Municipal Services Branch
      - Capacity Building
      - Municipal Collaboration
      - Planning
Municipal Affairs

AEMA (Alberta Emergency Management Agency)

AEMA will provide strategic leadership to the GoA in the fields of emergency management and business continuity, and collaborate with emergency management partners and stakeholders in order to build a safer, more disaster-resilient Alberta.
Municipal Affairs

- **Municipal Government Board**

  Municipal Affairs and Environment and Parks have been busy amalgamating similar boards. Between July and December 2016, the administrative operations of four boards – the Municipal Government Board (MGB), the New Home Buyers Protection Board (NHBPB), the Land Compensation Board (LCB) and the Surface Rights Board (SRB) – were examined and recommendations were made to combine for more efficient operations.

  Administrative Penalty Appeals are intended to be heard by the MGB as well.
Relationship between MA and SCC

- Alberta Municipal Affairs and the Safety Codes Council are both accountable to the Minister of Municipal Affairs – Hon. Shaye Anderson.

- The Public Safety Division develops and implements at the direction of the Minister public safety system policy, provides system oversight and develops/interprets technical requirements.

- The Safety Codes Council manages for the Ministers the accreditation of entities, the certification and training of SCOs, the appeals of Orders and provides advice to the Minister.
P.T.M.A.A.

Petroleum Tank Management Association of Alberta
P.T.M.A.A.

• **Delegated Administrative Organization for:**
  – Registration of Tanks (All UG, 2500L+AG)
  – Certification of installers and removers
  – Education of tank owners, installers, operators

• **Contracted Service Provider to AMA for:**
  – Plan review, permit issuance and site inspection for all tank installations where municipality is not accredited in tanks.
  – Ongoing “In service” inspection of tanks based upon established risk management criteria in AMA jurisdictions.
NBCC, NFCC, ABC and AFC

2018
2020
Alberta Fire Code

• Discussions are underway as to what the most effective process will be to update the current Fire and Building Code before 2021 and whether this is desirable.
• Under discussion at Sub councils.
• Target is to be able to use the published NFCC and NBCC in 2021 in Alberta.
• Methods of providing for administrative and any required Alberta specific items are under consideration.
Safety Codes Council

Fire Safety Codes Officer Training
Fire SCO Training

- Revised Scopes of Practice expected to go into effect by summer.
- The transition to these revised Scopes of Practice is expected to be complete on April 30, 2019.
- All Fire SCO’s will retain the scope of their current certification and can train towards other/higher certification from that point.
- New on-line training programs undergoing final review in pilot delivery for roll out by summer.
- Practical evaluations will be joint SCC/OFC process eligible for IFSAC/ProBoard seal.
Fire Alarm Panel

To reset or not to reset…
From The Fire Code

2.2.6.1. Fire Protection Equipment

1) No person shall tamper with or vandalize portable extinguishers, water-based fire protection systems, special fire extinguishing systems, fire alarm systems, emergency electrical power supply systems, emergency lighting and fire protection equipment.

The purpose of a Fire Alarm System is to detect a fire signature or manual activation and notify occupants and the fire department (either automatically or by occupant actions) of an activation which is an emergency situation (usually fire) which poses a risk and requires evacuation and intervention. This is, as per the code objectives, to limit the probability that persons might be delayed from egress.

The Alberta Building Code directs that systems be designed so that silencing cannot occur until it is verified no emergency exists (5 or 20 minutes depending upon system).

It is reasonable for Fire Department Officers to make determinations, on a site by site basis, as to who if anyone, in addition to the fire department, can determine that no emergency exists. System reset must not be done until the fire department has attended the site. In no instance should the Fire Department not attend to the site of an initiated fire alarm. This allows them to ensure that no emergency exists, allows them to record information from the fire alarm control panel as to what device(s) activated and ensure, in conjunction with the building operator, that the panel appears to be functioning normally and direct any required work by a fire alarm service company.

Other than deliberate false alarms, which may be subject to prosecution under the SCA and the Criminal Code, most system false alarms are the result of improper maintenance, poor design and device choice or both and the AHJ should direct compliance with AFC fire alarm maintenance requirements in all cases where this is lacking or inadequate.
• **Strathcona County**
  – Bylaw 68-2000

What do I do if my fire alarm is triggered by accident?
If your home fire alarm system has been triggered by accident, take the necessary steps to cancel the false alarm by calling 9-1-1 and explaining the situation and then notifying your monitoring company of the false activation.

Emergency Services will respond to all reported false fire alarms to any business which is required to have a fire alarm system, as per the Alberta Building Code. If your fire alarm system has been activated, but you’re not sure why:
- Do not reset the fire alarm system.
- Evacuate the building as per the Fire Safety Plan.
- Phone 9-1-1. Emergency Services will search for the cause of the activation and ensure the building is safe prior to occupants re-entering the building. The building owner or responsible party will be advised of what must be done in order to rectify the situation.
- A follow up by Emergency Services with the building owner will ensure the fire alarm system is functioning properly.

If any activation of a fire alarm system has been done maliciously, this is considered a criminal act under Section 437 of the Criminal Code of Canada, and charges may be laid.

• **City of Calgary:**
  – CFD does instruct building operators/managers that they should not silence the system and if they do they should follow up with some type of verbal messaging that informs people that the building is still in alarm and evacuation should continue.
From Across the Province

• RMWB
  – Bylaw 05/037
  – 6. Penalties
  – 6.1. No person shall:
    • (g) obstruct or otherwise interfere with access roads or streets or other approaches or cause to be placed, any matter or thing, so as to obstruct or interfere with the operation or use of any fire alarm, fire alarm control panels, manual alarm stations, or any fire detection device or equipment, fire hydrant, cistern, or body of water, water inlet or outlet connections on buildings designated for fire fighting purposes or any connections provided to a fire main, pipe, standpipe, sprinkler system, or other body of water designated for the purpose of fire fighting;
Fuel Tanker Vehicles
AER Directive 58: Oilfield Waste Management Requirements for the Upstream Petroleum Industry

• This directive outlines comprehensive regulatory requirements for the handling, treatment, and disposal of upstream oilfield waste. It provides a comprehensive overview of oilfield waste characterization and classification, waste manifesting and tracking, oilfield waste management facilities, application requirements for oilfield waste management facilities, waste management and disposal options.

• The principles and purpose of these requirements are to:
  • Describe the EUB's expectations on how the Alberta upstream oil and gas industry should manage oilfield wastes.
  • Identify the oilfield waste management responsibilities of the licensee and/or approval holder.
  • Promote waste volume minimization involving reuse, recycle, reduce, and recover philosophies.
  • Require the recording, retention, and submission of oilfield waste information that will assist in compliance with waste management practices.
Alberta Environment

• Alberta Environment and Parks (AEP) has responsibility for regulating the transportation, treatment and disposal of hazardous wastes and for hazardous waste management facilities that handle/dispose of hazardous and industrial waste.
• **Industrial Industry Practices**
  – Industrial Sump and Pit Wastes

– Industrial sumps differ from car wash sumps as the former serve a broad array of industry activities and require specific assessment and management.

– **Legal Framework**
  • The Environmental Protection and Enhancement Act (EPEA), the Waste Control Regulation (WCR), and the Activities Designation Regulation (ADR), complemented by the Alberta User Guide for Waste Managers, provide the legal framework for the management of wastes, including industrial sump and pit wastes. This legislation requires that any waste that is moved off-site must be characterized, classified and managed at approved facilities or in accordance with the written authorization of the Director.
  • Alberta's legislation is available on-line at [www.qp.gov.ab.ca/index.cfm](http://www.qp.gov.ab.ca/index.cfm).
Scrubabdubdub

- https://www.youtube.com/watch?v=ewADpwRK8qY
- https://www.youtube.com/watch?v=DCnEgOfkA4k
4.11.2.3. Parking inside Buildings
1) A tank vehicle shall not be parked inside a building unless the building is specifically designed for that purpose or the cargo tank has been purged in accordance with this Section.
2) If a tank vehicle is to be parked inside a building, provisions shall be made to ensure that there is sufficient space in the tank to compensate for thermal expansion of the flammable liquid or combustible liquid.
3) Before parking a tank vehicle inside a building, the vehicle shall be inspected to ensure that there are no leaks in the tank, piping or valves.
4.11.2.6. Repair and Servicing

1) No person shall repair or service the cargo tank of a tank vehicle in a building unless
   a) all flammable liquids and combustible liquids have been removed from the cargo tank and stored in a storage tank or container constructed and installed in accordance with this Part,
   b) the cargo tank has been purged with steam of flammable vapours or combustible vapours, outside the building or in a well-ventilated area, to less than 10% of the lower explosive limit, and
   c) while the cargo tank is being repaired, it is monitored for the presence of flammable vapours and combustible vapours using combustible gas detection equipment.

2) No person shall repair, service or store a tank vehicle in a building other than for repairs conducted in conformance with Article 4.11.2.2. and Sentence (1), unless
   a) the building is acceptable to the authority having jurisdiction, or
   b) all flammable liquids and combustible liquids have been removed from the cargo tank and the tank has been purged of flammable vapours or combustible vapours, outside the building or in a well-ventilated area, to less than 10% of the lower explosive limit.
Companies in Alberta

- BlastTech Energy Services Inc.
  http://www.blasttech.ca/tank-cleaning-edmonton-nisku-leduc
  – Class 1 Pressure Cleaning Systems
  http://www.class1clean.com/

- Four Quest Energy
  http://www.fourquest.com/services/chemical-cleaning/
Food Trucks
Mobile Cooking Operation
Dimensions: 133" h x 281" l x 88"w, 157" wheel base
4.1.9* Cooking equipment used in fixed, mobile or temporary concessions, such as trucks, buses, trailers, pavilions, tents or any form of roofed enclosure, shall comply with this standard unless otherwise exempted by the authority having jurisdiction in accordance with 1.3.2 of this standard.

A.4.1.9 The authority having jurisdiction can exempt temporary facilities, such as a tent, upon evaluation for compliance to the applicable portions of this standard. Although it might not be practical to enforce all requirements of this standard in temporary facilities, the authority having jurisdiction should determine that all necessary provisions that affect the personal safety of the occupants are considered.
NFPA 96 (2017 or 2018?)

- NFPA 96 Proposed Definition:

“Mobile or Temporary Cooking. Any cooking facility, apparatus or equipment, being operated on a one-time or interim basis, or for less than 90 days in the same location, other than at a fixed location, building or structure which has been inspected and permitted under another section of this code, regulation or statute, inclusive of self-propelled trucks and vehicles, trailered units, push carts, equipment located under cover of awnings, canopies or pop-up tents, or other structures for which a building permit has not been issued.”

Annex B Mobile and Temporary Cooking Operations

This annex is not a part of the requirements of this NFPA document unless specifically adopted by the jurisdiction at the discretion of the adopting jurisdiction. Additionally, information in this annex is intended to be incorporated on a voluntary basis. Although this annex is written in mandatory language, it is not intended to be enforced or applied unless specifically adopted by the jurisdiction or it is applied on a voluntary basis
The original food truck
Chuckwagon, pre-1800s
A kitchen on wheels
The aftermath...
Issues
Recent Incidents

Frites N’ Meats
- April 2011
- NYC
- Food Truck Accident
- 1 worker hospitalized for burns and bruises

Source: CBS New York
Recent Incidents

Canadian National Exhibition
- August 2012
- Toronto
- Propane leak
- No injuries

Source: CBC News Toronto
Recent Incidents

Deep Fat Fryer
• August 2014
• Venice, CA
• Deep Fat Fryer
• 0 injured

Source: NBC - Los Angeles
Recent Incidents

Summary of Recent Incidents

- Vehicle Accident
- Cylinder Structure
- Refueling Generators while cooking
- Fire
- Propane Leak
- Vehicle Accident
- Propane Leak
- Cylinder Structure
- Fire
- Refueling Generators while cooking
Alberta Building Code

- An MCO is not a “building” in the sense of being an occupancy which requires full compliance with all aspects of the Alberta Building Code (ABC); however, there are specific provisions in the ABC which deal with Commercial Cooking Equipment requiring compliance and which are designed to work in conjunction with, and are referenced within, the Alberta Fire Code (AFC), with regard to ventilation and fire suppression equipment.
Clause 1.1.1.1.(1)(m) of Division A of the ABC states:

Application of this Code

1) This Code applies to any one or more of the following:

   m) the installation, replacement, or alteration of equipment regulated by this Code,

Article 6.2.2.7. of Division B of the ABC states:

Commercial Cooking Equipment

1) Systems for the ventilation of commercial cooking equipment shall be designed, constructed and installed to conform to NFPA 96, “Ventilation Control and Fire Protection of Commercial Cooking Operations,” except as required by Sentence 3.6.3.1.(1) and Article 3.6.4.2.

2) Fire protection systems for commercial cooking equipment referred to in Sentence (1) using vegetable oil or animal fat shall conform to

   a) ANSI/UL 300, “Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment,” or
   b) ULC/ORD-C1254.6, “Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units.”
2.6.1.9. Commercial Cooking Equipment

1) Commercial cooking equipment exhaust and fire protection systems shall be designed and installed in conformance with the ABC.

2) Except as required in Sentences (3) to (5), the use, inspection and maintenance of commercial cooking equipment exhaust and fire protection systems shall be in conformance with NFPA 96, “Ventilation Control and Fire Protection of Commercial Cooking Operations.”

3) Hoods, grease removal devices, fans, ducts, and other appurtenances shall be cleaned at frequent intervals to prevent surfaces from becoming heavily contaminated with grease or other residues. (See Appendix A.)

4) Flammable cleaning materials or solvents shall not be used for the cleaning of exhaust systems.

5) Instructions for manually operating the fire protection systems shall be posted conspicuously in the kitchen as part of the fire safety plan.

6) Commercial cooking equipment that is certified shall be installed and maintained in conformance with its certification.

7) Uncertified commercial cooking equipment shall be installed and maintained so as not to create a fire hazard.

The Alberta Electrical Code Regulation, section 2, prescribes the conditions for the use of equipment related to electrical systems and applies these requirements to the term “approved” as referenced in the Canadian Electrical Code, Part 1.

The scope of the CE Code covers the wiring, equipment, components and accessories of most of the electrical appliances located and connected within and to a Mobile Cooking Operation. Electrical equipment must be certified and identified with acceptable markings, as per the Electrical Safety Information Bulletin:


In addition any (>30V) wiring within, and to, a MCO must be compliant with the requirements of the CE Code. The installation of wiring and the connection of electrical equipment is identified as an activity covered under the Permit Regulation.

The scope of these regulations and referenced codes covers all installation of appliances, equipment, components, and accessories where natural or propane gas is used for fuel purposes. Whenever the installation, extension, alteration or addition of a gas system occurs, compliance with the current code in force is required. Any natural gas and propane system installations in Mobile Cooking Operations must, therefore, comply with the requirements of the above standards and are identified as an activity covered under the Permit Regulation.

The Alberta Plumbing Code Regulation adopts the National Plumbing Code of Canada – 2015. The scope of this code addresses any portions of a plumbing system installation that is not certified as part of an RV or portable structure.
In addition..

There are other forms of legislation and regulation that will impact the safe and lawful establishment of Mobile Cooking Operations. The owner/operator is advised to contact:

1) Each local municipality for any business licenses, permits, zoning and location approvals/restrictions.
2) Environmental Public Health – Safe Food at Alberta Health Services for applicable licensing or inspection requirements. They can be reached through contact information for your area which is available at:

http://www.albertahealthservices.ca/eph/eph.aspx
Examples

- City of Calgary
  - Business License/Permit
    Deals with:
    - where the truck can operate in the City and includes a list of prohibited locations and requirements to be 100m from a school and 25m from another food establishment without written permission from that establishment.
    - Parking/Storage must be compliant with land Use Bylaw.
    - Operating Hours including night time operations/locations.
    - Size of the vehicle
    - Annual mass inspection event by City of Calgary Fire and Gas Safety Codes Officers who will issue an annual “Operational Sticker”.
    - Calgary Fire will conduct further on street/at event inspections regarding safe practices such as generator refueling, set up distances etc.
    - Surrounding municipalities tend to accept Calgary’s “sticker”.
Examples

• City of Edmonton
  - Deals with:
    - where the vendor can operate in the City including prohibited locations and requirements to be 400m from a school 10m from an intersection or LRT entrance and 20m from another food establishment without written permission from that establishment.
    - Operating Hours including night time operations/locations.
    - Verification of inspections by exhaust system and fire protection equipment technicians, plumbing, gas and electrical Safety Codes Officers. This includes the “gas valve” which is interconnected with the suppression system where provided.
    - This “Vendor Permit Sticker” requires annual renewal with re-inspections.
    - Edmonton Fire conducts further on street/at event inspections regarding safe practices such as generator refueling, set up distances etc.
    - Surrounding municipalities tend to accept Edmonton’s “sticker” and the Capital Region Fire Prevention Officers are discussing a regional process