Plan Review Guide for Mobile Food Preparation Vehicles and Trailers

Mobile Food Preparation Vehicles and Trailers. Vehicles and trailers for the purpose of preparing and serving food to the public. Vehicles and trailers intended for private recreation shall not be considered mobile food preparation vehicles.

Mobile Food Preparation Vehicles and Trailers

- **1.1 General.** Mobile food preparation vehicles shall comply with this section.
- **1.2 Exhaust hood.** Cooking equipment that produces grease laden vapors shall be provided with a kitchen exhaust hood in accordance with the International Fire Code (IFC) Section 609.
- **1.3 Fire protection.** Fire protection shall be provided in accordance with Section 1.3.1 through 1.3.2.
- **1.3.1 Fire protection for cooking equipment.** Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with the IFC Section 904.11. (**This section shall be met by December 31, 2018**)
- **1.3.2 Fire extinguisher.** Portable fire extinguishers shall be provided in accordance with the IFC Section 904.11.5.
- **1.4 Cooking appliance installation on vehicles.** Cooking appliances shall comply with the International Fuel Gas Code (IFGC) Section 623, International Mechanical Code (IMC) Chapter 9, and the following:
 - 1. Cooking appliances installed on vehicles shall be readily accessible under all conditions.
 - 2. To minimize possible damage and impaired operation due to items shifting in transit, cooking appliances shall be constructed and secured in place or otherwise protected.
 - 3. Cooking appliances shall be located so that a fire at any cooking appliance will not block egress of persons from the vehicle.
 - 4. Gas-fired cooking appliances shall be equipped with automatic devices designed to shut off the flow of gas to the main burner and the pilot in the event the pilot flame is extinguished.
 - 5. Installation of solid fuel-burning equipment such as ovens.
- **1.5 Appliance connection to fuel supply piping.** Gas cooking appliances shall be secured in place and connected to fuel supply piping with an appliance connector complying with ANSI Z21.69/CSA 6.16. The connector installation shall be configured in accordance with manufacturer's installation instructions. Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturer's instructions.

- **1.6 Cooking oil storage containers.** Cooking oil storage containers within mobile food preparation vehicles shall have a maximum aggregate volume not to exceed 120 gallons (454 L), and shall be stored in such a way as to not be toppled or damaged during transport in accordance with IFC Chapter 57 and Section 610.
- **1.7 Cooking oil storage tanks.** Cooking oil storage tanks within mobile food preparation vehicles shall comply with Section 1.7.1 through 1.7.5.
- **1.7.1 Metallic storage tanks.** Metallic cooking oil storage tanks shall be listed in accordance with UL 142 or UL 80, and shall be installed in accordance with the tank manufacturer's instructions.
- **1.7.2 Nonmetallic storage tanks.** Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer's instructions and shall also comply with all of the following:
 - 1. Tanks shall be listed for use with cooking oil, including maximum temperature to which the tank will be exposed during use.
 - 2. Tank capacity shall not exceed 200 gallons (757 L) per tank.
- **1.7.3** Cooking oil storage system components. Metallic and nonmetallic cooking oil storage system components shall include but are not limited to piping, connections, fittings, valves, tubing, hose, pumps, vents and other related components used for the transfer of cooking oil.
- **1.7.4 Design criteria.** The design, fabrication and assembly of system components shall be suitable for the working pressures, temperatures and structural stresses to be encountered by the components.
- **1.7.5 Tank venting.** Normal and emergency venting shall be provided for cooking oil storage tanks.
- **1.7.5.1 Normal vents.** Normal vents shall be located above the maximum normal liquid line, and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents are not required to vent to the exterior.
- **1.7.5.2 Emergency vents.** Emergency relief vents shall be located above the maximum normal liquid line, and shall be in the form of a device or devices that will relieve excessive internal pressure caused by an exposure fire. For nonmetallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents are not required to discharge to the exterior.
- **1.8 LP-gas systems.** Where LP-gas systems provide fuel for cooking appliances, such systems shall comply with IFGC, IFC Chapter 53 and Sections 1.8.1 through 1.8.5.

- **1.8.1 Maximum aggregate volume.** The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds propane capacity.
- **1.8.2 Protection of container.** LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement.
- **1.8.3 LP-gas container construction.** LP-gas containers shall be manufactured in compliance with the requirements of NFPA 58.
- **1.8.4 Protection of system piping.** LP-gas system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.
- **1.8.5 LP-gas alarms.** A listed LP-gas alarm shall be installed within the vehicle in the vicinity of LP-gas system components, in accordance with manufacturer's instructions and the following:
 - 1. The LP-Gas leak detection system shall be tested monthly.
 - 2. LP-Gas systems shall be inspected prior to each use.
 - 3. LP-Gas leak detection testing shall be performed every time a new LP-Gas connection is made or an LP-Gas cylinder is changed out.
 - 4. LP-Gas leak detection testing shall be documented and the documentation be held in the mobile or temporary unit and made available to the AHJ upon request.
- **1.9 CNG systems.** Where CNG systems provide fuel for cooking appliances, such systems shall comply with Sections 1.9.1 through 1.9.4.
- **1.9.1 CNG containers supplying only cooking fuel.** CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with sections 1.9.1.1 through 1.9.1.3
- **1.9.1.1 Maximum aggregate volume.** The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds water capacity.
- **1.9.1.2 Protection of container.** CNG containers shall be securely mounted and restrained to prevent movement. Containers shall not be installed in locations subject to a direct vehicle impact.
- **1.9.1.3 CNG container construction.** CNG containers shall be a NGV-2 cylinder.
- **1.9.2 CNG containers supplying transportation and cooking fuel.** Where CNG containers and systems are used to supply fuel for cooking purposes in addition to being used for transportation fuel, the installation shall be in accordance with NFPA 52.
- **1.9.3 Protection of system piping.** CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.

- **1.9.4 Methane alarms.** A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer's instructions.
- **1.10 Maintenance.** Maintenance of systems on mobile food preparation vehicles shall be in accordance with Sections 1.10.1 through 1.10.3.
- **1.10.1 Exhaust system.** The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Section 609.3.
- **1.10.2 Fire protection systems and devices.** Fire protection systems and devices shall be maintained in accordance with Section 901.6.
- **1.10.3 Fuel -gas systems.** LP-gas containers installed on the vehicle and fuel-gas piping systems shall be inspected annually by an approved inspection agency or a company that is registered with the U.S. Department of Transportation to requalify LP-gas cylinders, to ensure that system components are free of damage, suitable for the intended service and not subject to leaking. CNG containers shall be inspected every three years in a qualified service facility. CNG containers shall not be used past their expiration date as listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel-gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.
- **1.11 Separations.** The minimum building, vehicle and generator separations are following:
 - 1. Building separation. A minimum of 20 feet separation between any permanent structure and the mobile food service vehicle/trailer.
 - 2. Vehicle separation. A minimum of 10 feet separation between each mobile food service vehicle/trailer.
 - 3. Generator separation. A minimum of 15 feet separation of generators to LPG, CNG, flammable liquids. Permanently mounted
- **1.12 Electrical system.** The electrical system shall comply with National Electric Code as adopted by 8 AAC 70.025, the IFC Section 605 and sections 1.12.1 through 1.12.3.
- **1.12.1 Electrical equipment appliances, power strips and extension cords.** All electrical equipment, appliances, power strips, and extension cords shall be labeled by a nationally recognized testing laboratory, ie., UL, FM or NTRL.
- **1.12.2 Ampacity**. The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.
- **1.12.3. Extension Cords.** Extension cords and flexible cords shall not be a substitute for permanent wiring. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be

| subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances. |
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