Fire Prevention: Information Bulletin

MOBILE FOOD PREPARATION VEHICLE REQUIREMENTS

**Definition:** Vehicles that contain cooking equipment that produce smoke or grease-laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.

**General.** Mobile food preparation vehicles that are equipped with appliances that produce smoke or grease-laden vapors shall comply with this section.

**Inspection Frequency.** An annual visual inspection shall be conducted and required paperwork shall be provided at time of inspection to the City of Mauldin Fire Marshal’s Office.

**Permit required.** Permits issued by City of Mauldin Business Development Office 864.234.3475.

**Exhaust hood.** Cooking equipment that produces grease-laden vapors shall be provided with a kitchen exhaust hood in accordance with Section 607.

**Fire protection for cooking equipment.** Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.12.

**Fire extinguisher.** Portable fire extinguishers (Class K Extinguisher) shall be provided in accordance with Section 906.4.

**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 the manufacturer’s installation instructions. Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturers’ instructions.

**Cooking oil storage containers.** Cooking oil storage containers within mobile food preparation vehicles shall have a maximum aggregate volume not more than 120 gallons (454 L) and shall be stored in such a way as to not be toppled or damaged during transport.

**Cooking oil storage tanks.** Cooking oil storage tanks within mobile food preparation vehicles shall comply as follows:

- **Metallic storage tanks.** Metallic cooking oil storage tanks shall be listed in accordance with UL 80 or UL 142, and shall be installed in accordance with the tank manufacturer’s instructions.
- **Nonmetallic storage tanks.** Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer’s instructions and shall comply with both of the following:
  - Tanks shall be listed for use with cooking oil, including maximum temperature to which the tank will be exposed during use.
  - Tank capacity shall not exceed 200 gallons (757 L) per tank.

**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.

**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.

**Tank venting.** Normal and emergency venting shall be provided for cooking oil storage tanks.
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.

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 non-metallic 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.

LP-gas systems. Where LP-gas systems provide fuel for cooking appliances, such systems shall comply with Chapter 61 and the following:

- **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 (91 kg) propane capacity.
- **Protection of container.** LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement.
- **LP-gas container construction.** LP-gas containers shall be manufactured in compliance with the requirements of NFPA 58.
- **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.
- **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 the manufacturer’s instructions.

CNG systems. Where CNG systems provide fuel for cooking appliances, such systems shall comply as follows:

- **CNG containers supplying only cooking fuel.** CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with:
  - **Maximum aggregate volume.** The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds (590 kg) water capacity.
  - **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.
  - **CNG container construction.** CNG containers shall be an NGV-2 cylinder.
- **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.
  - **Protection of system piping.** CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage and damage from vibration.
  - **Methane alarms.** A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer’s instructions.

Maintenance. Maintenance of systems on mobile food preparation vehicles shall be as follows:

- **Exhaust system.** The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Section 607.3.
- **Fire protection systems and devices.** Fire protection systems and devices shall be maintained in accordance with Section 901.6.
- **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 from damage, suitable for the intended service and not subject to leaking. CNG containers shall be inspected every 3 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.

Please contact the Mauldin Fire Department – Fire Prevention Bureau at (864)-288-5094 with any questions or for additional information.