

# Special Event & Festival Fire Safety Guidebook

Las Cruces Fire Department 201 W. Picacho Las Cruces, New Mexico 88001

The purpose of this guidebook is to establish the fire and life safety guidelines and responsibilities for the event sponsors and vendors and the Las Cruces Fire Department (LCFD) Prevention Bureau Staff.

The LCFD Prevention Bureau Staff views these events as a team effort. The team will function better as each member is more aware of their roles and responsibilities. With willingness and effort on the part of all of the team members, a safe and enjoyable event is more likely to occur.

Please contact us at (575) 528-4150 if you have any questions regarding these fire prevention guidelines for your event. Our goal is to assist you in having a successful event through fire safety preparedness and fire prevention information and education.

### **Definitions**

For the purposes of this guidebook, the following definitions shall apply:

- <u>Canopy or tent</u> A temporary structure, the covering of which is made of pliable material that achieves its support by mechanical means such as beams, columns, poles, or arches, or by rope, cables, or both.
- Mobile Food Unit- A food service establishment that is vehicle mounted or wheeled and is capable of being readily moveable
- <u>Cooking booth</u> Booth where food is prepared by a heating or cooking process such as, but not limited to, grilling, frying, barbecuing, flambé, deep fat frying, baking, warming, or boiling.
- Vendor booth Any booth other than a cooking booth.

## Responsibilities

**Event Sponsor** - The Event Sponsor assumes overall responsibility for the set-up and running of the event and ensures compliance with fire and life safety guidelines. A copy of this guidebook shall be distributed to each Vendor.

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- The Event Sponsor shall provide a site plan to the LCFD Prevention Bureau Staff showing the following:
  - The name of all streets and areas that is included in the event
  - The location(s) of LCFD access lanes (minimum width 20 feet)
  - The location of stages, non- food booth vendors, food vendors and display areas
  - Location of emergency exits
  - A list of food vendors with the type of food and cooking method

<u>Event Vendor</u> – Each Event Vendor is responsible for the safe operation of their booth, display, or attraction. Vendors shall coordinate the event setup and take down with the Event Sponsor to ensure compliance with fire and life safety guidelines.

- All Event Vendors shall:
  - Keep fire lanes, LCFD connections, and building access clear and unobstructed
  - Be prepared for a fire inspection beginning 2 hours prior to opening for business
  - Correct any violations prior to opening for business
  - Maintain all fire and life safety guidelines for the duration of the event

<u>LCFD Prevention Bureau Staff</u> – Prevention Bureau Staff are responsible for inspecting all related aspects of the event prior to opening. The inspectors shall issue correction notices, if required, and re-inspect to ensure compliance.

- The inspections shall include, but not be limited to the following:
  - Hot food and non-food vendors
  - LCFD access
  - Access to hydrants, LCFD connections, and fire control rooms
  - Event egress
  - Special amusement rides, attractions, & displays
  - Generators and propane tanks
  - Stages
  - Assembly areas/tents
  - Pyrotechnics and open flame effects

## **General Requirements**

#### Fire hazards and/or concerns

- Finished ground shall be maintained clear of all combustible materials and vegetation.
- No smoking within booths, tents, or any structure.

- Remove trash accumulations regularly.
- No open flame devices (except for cooking purposes) of any kind shall be present within the booth or any structure.
- There shall be no storage of flammable or combustible liquids within 10' of any booth/tent/structure.
- Heaters Electric or fuel-fired
  - Devices must be certified and labeled by an approved testing laboratory.
  - A clearance of 3 feet around all sides must be maintained at all times.
  - Combustible materials shall be kept away from heat sources.

#### **Electrical Power**

- Generators shall be placed only in locations approved for festival use.
- When refueling generators a clearance of 50 feet shall maintained from any part of the event to include all booths/tents/structure.
- Extra fuel shall be stored within a container that is correctly labeled and approved by the Prevention Bureau Staff.
- Smoking and open flames shall be prohibited within 25 feet of refueling operations.
- Extension cords and power strips shall be of a grounded type, a minimum of 14 gauge, rated for the intended use, and approved for exterior use.
- Generators, if used, shall be kept at least 5 feet away from booth and shall be protected from contact by the public.

#### Fire Extinguishers

#### All booths must have a minimum of one 2A:10:BC fire extinguisher.

- Fire extinguishers shall be quickly accessible and kept safe from contact by the public.
- The type of booth will dictate any further fire extinguisher requirements. For example, all cooking booths shall have a K Class fire extinguisher.
- All fire extinguishers located within any booth shall have current inspection/service tags affixed to them.

## Access for LCFD / Emergency Apparatus

During large events it is especially important to maintain access for Fire/Emergency apparatuses. To ensure a safe event, all fire access codes shall be enforced.

#### Access through the event

• A fire lane of not less than 20 feet in width and without overhead obstructions lower than 13.5 feet shall be maintained.

- Dead-end fire lanes in excess of 150 feet shall have provisions for turning the apparatus. The radius for the turns shall be approved by the LCFD.
- Signs shall be provided designating Fire Access /No Parking
- All existing fire lanes shall be enforced

#### **Access to Buildings**

- Access to the following shall not be obstructed:
  - All exterior building doors, openings, and walkways
  - LCFD control rooms
  - LCFD pump rooms
  - Parking structures
- The width of the access routes shall be determined by the Las Cruces Fire Prevention Bureau Staff. Additional building access may vary depending on the building and the venue.

#### **Access to Water Supplies:**

- Access to the following shall not be obstructed:
  - Fire Hydrants
  - LCFD connections
  - Post-indicator valves
  - OS&Y valves
- Vendors shall be required to maintain a clearance of 15 feet per side of any water supply connection. All other existing requirements for access to fire hydrants and other water supply connections shall be enforced. Any vendor blocking access to water supplies shall be relocated immediately.

## Exiting Requirements

This section will address two types of events: 1) Restricted access events, and 2) Events that block street access

#### Restricted Access Events

This type of event typically takes place in a park or other large open area. The designated area for the event is confined by temporary fencing, natural barriers, or other structures.

The number of exits, exit width, & exit spacing shall be determined and approved by the LCFD Prevention Bureau Staff. Below is the minimum standards, however, changes greater or less than, shall be at the discretion of the LCFD Prevention Bureau Staff.

Number of exits

- A minimum of two (2) exits shall be provided for the event.
- A minimum of three (3) exits shall be provided when the site accommodates 1,000 3,000 persons.
- A minimum of four (4) exits shall be provided when the site accommodates more than 3,000 persons.
- Exit Spacing Exits shall be equally spaced along the perimeter of the fence. The exits shall be spaced so that no exit is greater than a distance of 400 feet of travel. Additional exits shall be added if needed.
- Exit Width Exit width shall be no less than six (6) feet clear width or approximately one panel width of temporary fencing.
- Exit Staffing Each exit shall have a member of the security staff assigned to it. The Security provider shall provide a gate assignment roster upon request.
- Exit Sign/Marking Each exit shall be designated as follows:
  - Exit signs shall have a white background with contrasting letters
  - Exit signs shall measure no less than 18 x 24 inches
  - Sign lettering shall measure 12 inches in height with a minimum of 1 ½ " thick letters
  - Signs shall be placed at the top center of the exit panel

#### **Blocked Streets**

This type of event blocks off a main street and may block cross streets. In addition to providing access for fire apparatus, public egress shall also be accounted for.

- Exit Placement Exits shall be placed at both ends of the street closure. Cross streets shall also have emergency exit access.
- Exit Width Exit width shall be no less than six (6) feet clear width or approximately one panel width of temporary fencing.
- Exit Staffing Each exit shall have a member of the security staff assigned to it. The Security provider shall provide a gate assignment roster upon request.
- Exit Sign/Marking Each exit shall be designated as follows:
  - Exit signs shall have a white background with contrasting letters
  - Exit signs shall measure no less than 18 x 24 inches
  - Sign lettering shall measure 12 inches in height with a minimum of 1 ½ " thick letters
  - Signs shall be placed at the top center of the exit panel

### **Cooking Booth Requirements**

#### **Construction and Location**

- All fabrics or membranes covering cooking booths shall be certified flame retardant in accordance with NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2004 Edition.
- All cooking devices shall be isolated from the general public not less than 48 inches away or must be protected by barriers between the devices and the public
- The cooking equipment shall be placed on noncombustible surface materials with a well stabilized cooking surface
- The cooking equipment shall be kept a horizontal distance of not less than 24 inches from any combustible material
- Flooring materials used within cooking booths and cooking equipment shall be non-combustible or fire retardant. (Exception: 3/8" plywood or similar material.)
- Each cooking booth shall have at least one exit path, a minimum three (3) feet wide and 6 feet 8 inches high. Booth frame shall not obstruct exit path.
- Cooking booths shall have a minimum clearance of ten (10) feet on at least two sides with clearance of at least ten (10) feet from any vendor booth.

#### **Propane Cylinders**

- Propane cylinders shall be installed upright, secured to prevent overturning, and protected
  from any physical damage. The preferred method would be nested together and strapped or
  secured to a free standing pole and strapped by one or more restraints. Propane cylinders shall
  not be attached in any way to a canopy or tent.
- Propane tanks shall be located so that they are not accessible to the public.
- Propane tanks shall be located at least 5 feet from any cooking equipment, tent, booth or structure.
- Propane pressure relief devices shall be positioned as to direct vented vapors away from ignition sources.
- All propane gas hoses shall be in good condition, approved for the intended service and shall be continuously marked with LP-GAS, PROPANE, 350 PSI WORKING PRESSURE, and the manufacturer's name or trademark.
- All hoses/connections must be leak free.
- All hoses must be kept out of the way of foot and vehicular traffic.
- Cylinders not connected shall be stored or nested away from areas of cooking location.
- Turn off tanks when not in use.
- A maximum of three 100 lb. cylinders shall be used at any one time for each cooking booth.

• "NO SMOKING" signs shall be next to or directly above the propane cylinder(s) and visible to the public. These signs shall be posted with a minimum of 2" red lettering with a white background.

#### Special Fire Extinguisher

- A listed and labeled Class K fire extinguisher must be provided for the protection of cooking appliances that use combustible cooking media (vegetable or animal oils and fats) that produce grease-laden vapors.
- Each cooking booth must also have a minimum of one dry 2A:10BC chemical fire extinguisher.
- Fire extinguishers shall be securely mounted adjacent to the exit of the booth and must be visible and accessible at all times.
- All fire extinguishers must be serviced within the last year, with a service tag attached.

## **Vendor Booth Requirements**

#### **Construction & Location**

- All fabrics or membranes covering cooking booths shall be certified flame retardant in accordance with NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2004 Edition.
- Each vendor booth shall have at least one exit-way, a minimum of three (3) feet wide by 6 feet 8 inches high. Booth frame shall not obstruct exit path.
- Vendor booths shall have a minimum clearance of twenty (20) feet on at least one side, with clearance of at least ten (10) feet from any cooking booth.
- Grouping of vendor booths shall be limited to cover no more than 1400 ft<sup>2</sup> with no dimension longer than 100 lineal feet.

#### Mobile Food Unit Checklist



The Las Cruces Fire Department has provided the following guidelines to ensure all mobile food units (MFU's) meet the same minimum requirements. Prior to having your MFU inspected, please address the following items.

#### LOCATION of MFU's

- MFU's are required to be separated from buildings or structures, combustible materials, vehicles, and other cooking operations by a minimum of 10 feet.
- MFU's shall not obstruct any entrances or exits of nearby buildings/structures.
- MFU's shall not block fire department access roads, fire lanes, fire hydrants or other fire protection devices and equipment.
- MFU's shall not operate within an enclosed structure (warehouse, garage, etc....).

#### **ELECTRICAL/MECHANICAL**

- Electrical wiring in good working condition?
- Multi-plug adaptors not allowed.
- Power strips must have surge protection.
- Extension cords are not allowed as permanent wiring.
- · Open breaker/junction boxes and spliced wiring not allowed.
- If grease vapors are produced an exhaust hood is required.
- Hood, appliances, vents, roof clean and free of grease?
- Hood/duct system inspected every 6 months?
- All grease producing appliances under hood?

#### FIRE EXTINGUISHERS

- Minimum 2A: 10BC rated fire extinguisher installed (shall be serviced/inspected/tagged annually by a licensed contractor) and easily accessible.
- Class K fire extinguisher (1.5 gallon) required if cooking produces grease vapors and shall be serviced/inspected/tagged annually by a licensed contractor.
- If unit is outfitted with an automatic fire extinguishing system (Type 1 Hood), it is required to be inspected and tested every 6 months by a licensed contractor.

#### MEANS OF EGRESS

- Protruding objects are not to reduce the minimum clear width of accessible egress routes.
- Walking surfaces of the egress route are to have a slip resistant surface and be securely attached.
- Means of egress (aisle way) is to be free of any obstructions that would prevent its use.

#### LIQUID PROPANE

- Any D.O.T. cylinder for L.P. gas must be marked with a requalification date(s) if the container is more than 12 years old.
- Any L.P. gas container showing excessive rust, corrosion, pitting, or denting shall not be used.
- All LP gas cylinders are required to have their pressure relief devices located to direct vented vapors away from personnel, ignition sources, containers and structures, as well as enclosed spaces to prevent personal injury and property damage.
- All LP gas cylinders are secured to prevent falling caused by contact or vibration.
- All LP gas cylinders shall be protected from vehicle impact.
- · All LP gas cylinders shall be stored upright and with the valve end up.
- Piping, tubing, pressure regulators and valves shall be kept gas tight to prevent leakage.
- A flexible hose is installed between the regulator and fixed piping system. This hose shall be in good condition, approved for intended service and shall be continuously marked with LP-GAS, PROPANE, 350 PSI WORKING PRESSURE, and the manufacturer's name or trademark.
- All connections shall be professionally installed (metal automotive screw-type hose clamps are not allowed).
- Perform leak testing (soap and water solution or gas detector) each day before opening for business, any time a cylinder is exchanged, and any time the L.P. gas system is modified.
- · A maximum of two 100-pound cylinders shall be used.
- NO SMOKING sign located next to or directly above the propane cylinder(s) and visible to the
  public. These signs shall be posted with a minimum of 4" red lettering with a white background.

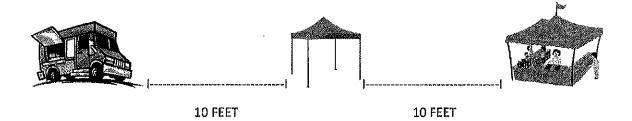
#### **GENERAL HOUSEKEEPING**

Housekeeping and maintenance procedures shall be performed by the operator of the MFU or his/her designee to prevent the accumulation of grease on walls and other surfaces.



The following items are not enforced at this time but are recommended and may become requirements in the future.

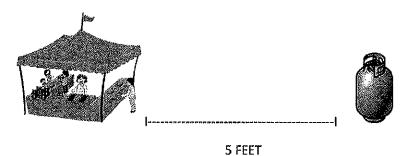
- Carbon monoxide alarm
- Propane detector for leak testing
- Staff training documentation (systems use, extinguisher training)



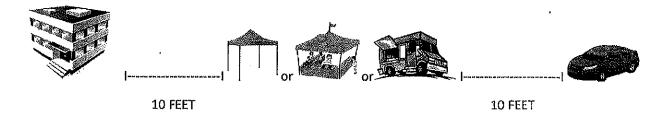
Cooking tents/food trucks and non-cooking tents need to be separated by no less than 10 FEET.



Multiple tents used for non-cooking **DO NOT** need to be separated.



Propane cylinders 500 gallons or less must be at least <u>5 FEET</u> away from any tent.



Any cooking/non-cooking tent, booth or food truck must be a minimum of 10 FEET away from any structure or vehicle.

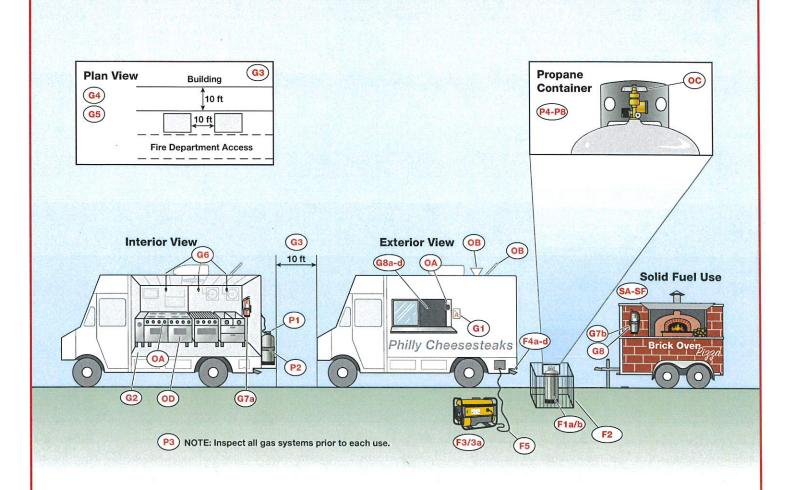


5 FEET

Generators need to be at least 5 FEET from any tent. Generators also need to be isolated from public contact.



## FOOD TRUCK SAFETY



NFPA code references are provided at the end of each item. The red keys correspond to the NFPA food truck safety diagram. For more detailed information, see NFPA 1 and Annex B in NFPA 96.

#### **General Safety Checklist**

- Obtain license or permits from the local authorities. [1:1.12.8(a)] G1
- ☐ Ensure there is no public seating within the mobile food truck. [1:50.7.1.6.3] G2
- Check that there is a clearance of at least 10 ft away from buildings, structures, vehicles, and any combustible materials. [96:7.8.2; 96:7.8.3 for carnivals only] G3
- Verify fire department vehicular access is provided for fire lanes and access roads. [1:18.2.4] G4
- ☐ Ensure clearance is provided for the fire department to access fire hydrants and access fire department connections. [1:13.1.3; 1:13.1.4; 1:13.1.5] G5
- □ Check that appliances using combustible media are protected by an approved fire extinguishing system. [96:10.1.2] G6

- Verify portable fire extinguishers have been selected and installed in kitchen cooking areas in accordance with NFPA 10. [96:10.9.3] G7a
- □ Where solid fuel cooking appliance produce grease-laden vapors, make sure the appliances are protected by listed fire-extinguishing equipment. [96:14.7.1] G7b
- ☐ Ensure that workers are trained in the following: [96:B.15.1]: G8
  - ☐ Proper use of portable fire extinguishers and extinguishing systems
    [10:1.2] G8a
  - ☐ Proper method of shutting off fuel sources [96:10.4.1] G8b
  - ☐ Proper procedure for notifying the local fire department [1:10.14.9 for carnivals only] G8c
  - ☐ Proper procedure for how to perform simple leak test on gas connections [58:6.16, 58:6.17] G8d



## FOOD TRUCK SAFETY CONTINUED

#### **Fuel & Power Sources Checklist**

- Verify that fuel tanks are filled to the capacity needed for uninterrupted operation during normal operating hours. [1:10.14.10.1 for carnivals only] Fla
- Ensure that refueling is conducted only during non-operating hours.
   [96:B.18.3] F1b
- Check that any engine-driven source of power is separated from the public by barriers, such as physical guards, fencing, or enclosures. [96:B.16.2.2] F2
- ☐ Ensure that any engine-driven source of power is shut down prior to refueling from a portable container. [1:11.7.2.1.2] F3
- Check that surfaces of engine-driven source of power are cool to the touch prior to refueling from a portable container. F3a
- Make sure that exhaust from engine-driven source of power complies with the following: F4
  - ☐ At least 10 ft in all directions from openings and air intakes [96:B.13] F4a
  - ☐ At least 10 ft from every means of egress [96:B.13] F4b
  - ☐ Directed away from all buildings [1:11.7.2.2] F4c
  - ☐ Directed away from all other cooking vehicles and operations [1:11.7.2.2]
- Ensure that all electrical appliances, fixtures, equipment, and wiring complies with the NFPA 70®. [96:B.18] F5

#### **Propane System Integrity Checklist**

- ☐ Check that the main shutoff valve on all gas containers is readily accessible. [58:6.26.4.1(3)] P1
- ☐ Ensure that portable gas containers are in the upright position and secured to prevent tipping over. [58:6.26.3.4] P2
- ☐ Inspect gas systems prior to each use. [96:B.19.2.3] P3
- Perform leak testing on all new gas connections of the gas system. [58:6.16;
   58:6.17] P4
- Perform leak testing on all gas connections affected by replacement of an exchangeable container. [58:6.16; 58:6.17] P5
- Document leak testing and make documentation available for review by the authorized official. [58:6.26.5.1(M)] P6
- ☐ Ensure that on gas system piping, a flexible connector is installed between the regulator outlet and the fixed piping system. [58:6.26.5.1(B)] P7
- □ Where a gas detection system is installed, ensure that it has been tested in accordance with the manufacturer's instructions. [96:B.19.2.1] P8

#### **Operational Safety Checklist**

- ☐ Do not leave cooking equipment unattended while it is still hot. (This is the leading cause of home structure fires and home fire injuries.) OA
- Operate cooking equipment only when all windows, service hatches, and ventilation sources are fully opened. [96:14.2.2; 96:14.2.3] OB
- ☐ Close gas supply piping valves and gas container valves when equipment is not in use. [58:6.26.8.3] OC
- Keep cooking equipment, including the cooking ventilation system, clean by regularly removing grease. [96:11.4] OD

## Solid Fuel Safety Checklist (Where Wood, Charcoal, Or Other Solid Fuel Is Used)

- ☐ Fuel is not stored above any heat-producing appliance or vent.

  [96:14.9.2.2] SA
- ☐ Fuel is not stored closer than 3 ft to any cooking appliance. [96:14.9.2.2] SB
- ☐ Fuel is not stored near any combustible flammable liquids, ignition sources, chemicals, and food supplies and packaged goods. [96:14.9.2.7] SC
- ☐ Fuel is not stored in the path of the ash removal or near removed ashes. [96:14.9.2.4] SD
- ☐ Ash, cinders, and other fire debris should be removed from the firebox at regular intervals and at least once a day. [96:14.9.3.6.1] SE
- Removed ashes, cinders, and other removed fire debris should be placed in a closed, metal container located at least 3 ft from any cooking appliance.
   [96:14.9.3.8] SF

#### **NFPA RESOURCES**

NFPA 1, Fire Code, 2018 Edition

NFPA 1 Fire Code Handbook, 2018 Edition

NFPA 58, Liquefied Petroleum Gas Code, 2017 Edition

LP-Gas Code Handbook, 2017 Edition

NFPA 70®, National Electrical Code®, 2017 Edition

National Electrical Code® Handbook, 2017 Edition

NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2017 Edition

NFPA 96: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations Handbook, 2017 Edition

## BECOME AN NFPA MEMBER

FOR MORE OF THESE RESOURCES



NOTE: This information is provided to help advance safety of mobile and temporary cooking operations. It is not intended to be a comprehensive list of requirements for mobile and temporary cooking operations. Check with the local jurisdiction for specific requirements. This safety sheet does not represent the official position of the NPPA or its Technical Committees. The NPPA disclaims liability for any personal injury, properly, or other damages of any nature whatsoever resulting from the use of this information. For more information, go to infpa.org/foodtrucksafety.

### FIRE SAFETY TIPS FOR MOBILE COOKING OPERATIONS



- Does your jurisdiction require a license or permit to operate (e.g. local fire/health department)?
- Is cooking equipment attended at all times?
- Are all required ventilation openings open during cooking operations?
- Is the cooking hood/ventilation system free from grease?
- Is the vehicle parked at least 10 feet from buildings, other vehicles, or combustibles?
- Is the vehicle parked so as not to block fire hydrants, fire lanes, fire department connections, exits, etc.?

#### Training

- Are employees trained in proper use of cooking equipment?
- Are employees trained in how to shut-off fuel sources (e.g. propane, generators)?
- Are employees trained in how to notify the local fire department in an emergency?
- Are employees trained in proper storage, handling and fueling procedures?
- Are employees trained in how to perform a leak test and when one is needed?
- Are workers trained in the proper use of portable fire extinguishers and hood extinguishing system?

#### Fire Protection

#### PORTABLE FIRE EXTINGUISHERS

• Are portable fire extinguishers charged, not obstructed, and in operating condition?

 Are portable fire extinguisher located near the cooking appliance, solid fuel storage, and any portable energy source (e.g. generator)?

#### Hood Fire Suppression System

• Is the hood fire suppression system charged and in operating condition?

#### Fuel and Power Sources

#### **PROPANE**

- Is the propane system inspected prior to use?
- Are the propane tanks secured in an upright position?
- Are the propane tanks within their hydrostatic test date?
- Is the propane system in good condition, (i.e. no leaks, rust)?
- Has the propane system been leak tested?
- Has a leak test been performed when a new tank is installed, or a modification to the system has been made?
- Is documentation available for any leak test?
- Is the main shut-off marked, in plain view and easily assessable?
- Is the fuel supply shut off when not in use and while in transit?
- On gas system piping, is a flexible connector installed between the regulator outlet and the fixed piping system?

#### **ELECTRICAL**

- Is the electrical system and other equipment in good working condition?
- Are extension cords in good condition?
- Is the electrical system, including extension cords in accordance with the electrical code?

#### **GENERATORS**

- Are generators placed at least 10 feet from buildings, structures, vehicles and combustibles?
- Are generator exhausts directed away from mobile cooking vehicle, vehicles, buildings, structures, exits and openings?
- Are generators protected from contact by the public?
- Are fuel supplies properly stored?
- When refueling are the generators shut down, engine cooled and then refueled?

#### **SOLID FUEL**

- Is combustible solid fuel stored properly and away from combustibles or heat producing appliances?
- Are ashes, cinders, and other fire debris removed at the end of the day and stored in a proper container away from the vehicle, buildings and combustibles?
- This tip sheet provides some safety information to help advance safety of mobile and temporary cooking operations. It is not intended to be a comprehensive list of requirements for mobile and temporary cooking operations. You should check with your local jurisdiction for specific requirements. This tip sheet does not represent the official position of the NFPA or its Technical Committees. The NFPA disclaims liability for any personal injury, property, or other damages of any nature whatsoever resulting from the use of this information.



