City of Chicago, Chicago Fire Department: Fire Prevention Bureau

Fire Safety Permit

Consultation Packet











FIRE SAFETY PERMIT PROCESS

STATEMENT OF CFD POLICY REGARDING FIRE SAFETY PERMIT APPLICATIONS

All mobile food vehicles that will use a **GASOLINE, DIESEL OR PROPANE SUPPLIED ELECTRIC GENERATOR**; **PROPANE GAS OR COMPRESSED NATURAL GAS; TYPES I OR II EXHAUST HOOD AND/OR FIRE SUPPRESSION SYSTEM** must apply for a fire safety permit issued by the Chicago Fire Department, Fire Prevention Bureau [CFD-FPB].

The <u>Fire Prevention Bureau</u> shall review all completed fire safety permit applications to determine whether the vehicle meets the fire safety specifications outlined in the City of Chicago Mobile Food Vendors and Shared Kitchens Rules.

Reference: City of Chicago Mobile Food Vendors and Shared Kitchens Rules Part II: Rules 2, 4 & 5.

The Deputy Fire Commissioner of the Chicago Fire Department Fire Prevention Bureau shall have final authority to approve or deny mobile food vehicle fire safety permits and request any amendments or revisions that may be necessary.

To obtain a fire safety permit, the mobile food vehicle owner must complete a 5 step process. The steps required are as follows:

- Step 1 BACP Meeting
- Step 2 Vehicle Plans: Mobile Food Vehicle Suppression Systems
- ➤ Step 3 Inspection
- Step 4 Permit Application
- Step 5 Propane Handling Training





To obtain a fire safety permit, the mobile food vehicle owner must complete a process that begins in the initial consultation with a business consultant at the <u>City's Department of Business Affairs and Consumer Protection [BACP]</u>.

Reference: Mobile Food Vendor Licenses

Step 1 - BACP Meeting

In your initial meeting with the BACP business consultant, the Consultant and the Health Sanitarian will determine if you are required to acquire a fire safety permit from the Fire Prevention Bureau.

Reference: Mobile Food Vehicle Fire Safety Assessment & Inspection Checklist – pg. 1

Step 2 - Vehicle Plans: Mobile Food Vehicle Suppression Systems

Using the same process required of brick-and-mortar businesses by the Chicago Fire Department, mobile food vehicles operating a suppression system on board are required to submit the vehicle plan/blueprint to the <u>Fire Prevention Bureau</u> on the blueprint designer's official company letterhead.

Submissions from unlicensed individuals will not be approved.

The vehicle owner must include a \$150.00 check or money order (non-refundable) made payable to the City of Chicago, Department of Revenue, along with these blueprints to the <u>Fire Prevention Bureau</u> for processing. CFD-FPB personnel will review the blueprints to determine if the vehicle's fire suppression system meets fire safety requirements.

Vehicle blueprints should be addressed to: John Javorka, P.E., LEED AP

Deputy Commissioner

Chicago Fire Department – Fire Prevention Bureau

444 N. Dearborn St., 2nd Floor

Chicago IL., 60654

Reference: Mobile Food Vehicle Suppression System Blueprint Checklist





Step 3 - Inspection

If the applicant's suppression system blueprints are approved, an initial inspection will be conducted by CFD-FPB personnel in conjunction with the Health Department. The checklist enclosed here is your guide to initial and subsequent inspections.

Reference: Mobile Food Vehicle Fire Safety Assessment & Inspection Checklist - pg. 2

Step 4 - Permit Application

If the applicant's vehicle passes inspection, the applicant will submit an additional \$100.00 check or money order (non-refundable) made payable to the City of Chicago Department of Revenue, to the <u>Fire Prevention Bureau</u> along with the fire safety permit application for processing. Once approved, the final fire safety permit must always be kept in the vehicle.

Reference: Mobile Food Vehicle Fire Safety Permit Application

Step 5 - Propane Handling Training: Mobile Food Dispenser (MFD) and Mobile Food Preparer (MFP) business license applicants with gasoline, diesel, propane or natural gas system installed in their mobile food vehicle must complete a Fire Safety Class (FSC) conducted by the Chicago Fire Department - Fire Prevention Bureau. At present, this training is a stand-alone course instructed by the Chicago Fire Department- Fire Prevention Bureau. Contact your BACP consultant, or 312.74.GOBIZ (312.744.4629), for more information regarding this course.

All mobile food vehicles must always have a person trained in handing and refilling propane on board.

Reference: Mobile Food Vehicle Operator Fire Safety Class





Mobile Food Vehicle Fire Saftey Specifications and Practices

NOTE: The Chicago Fire Department reserves the right to amend these safety regulations. These regulations shall remain in force at least until comprehensive mobile food vehicle fire safely regulations are adopted by the Fire Protection Association (NFP.4).

Part II - Mobile Food Vendors

Rule 2. Application, permitting, inspection and licensure requirements.

- (C) In addition to the above requirements, applicants whose vehicle will have a fire suppression system will need to have the company that designed the system submit vehicle plans to the Chicago Fire Department (CFD), along with a \$150.00 non-refundable fee.
- (D) In addition to the above requirements, applicants whose vehicles will use a generator, propane, compressed natural gas or have a fire suppression system must obtain a fire safety approval. Such approval can only be granted after 1) the CFD has reviewed and approved the applicant's fire suppression system; 2) the vehicle has passed a joint inspection by the CFD and the Health Department; and 3) the applicant submits the following information, along with a \$100.00 non-refundable fee, to the CFD:
 - (1) Name and address of the applicant, name and address of the business and name and address of the commissary.
 - (2) If the vehicle has propane or natural gas, the names(s) of all employees that completed a CFD-approved propane/natural gas handling training course.
 - (3) Detailed diagrams (preferably three-dimensional computer-aided drawings) of the propane, natural gas and fire suppression system and vehicle layout from no fewer than four different perspectives, including a top-view layout and an interior cut-away drawing of the equipment mounted along each wall.
 - (4) Manufacture date, number, size, location, model, and water and LP capacity of propane and/or natural gas tanks.
 - (5) Number, size, location, year of production, make and model of each propane and natural gas appliance.
 - (6) Location and model of all electrical equipment.
 - (7) Location, model and size (Amps/Voltage) of in-line generators.
 - (8) Location, size, make, model and installer of fire suppression system and exhaust hood.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





- (9) Location, total cubic feet per minute (cfm) output, make, model and installer of ventilation system.
- (10) Location and type of all flammable liquids and other fire hazards.
- (11) Picture of vehicle tire and loading placard located within driver's door frame and a picture of certified scale ticket for the vehicle obtained from a weigh station as finally configured.
- (12) Name and registration information of the manufacturer of the vehicle, including Illinois Dealer's License number or comparable registration from another state (including the identity and qualifications of any customizers, up-fitters or second-stage manufacturers that have altered the configuration of the vehicle or consulted in the design process).
- (13) If the permit application involves a previously-owned vehicle, it must include: 1) digital pictures of the propane, natural gas and fire suppression systems; 2) kitchen layout in present working order from no fewer than three angles; 3) a description of any modifications made to the vehicle since initial licensure; and 4) the identity of second-stage manufacturers involved.
- (E) Continuing expectations for fire safety permit holders:
 - (1) Once approved, visual design plans must be posted and made visible in the mobile food vehicle for inspection personnel to examine. In addition, a complete copy of the approved fire safety permit application must be kept in the vehicle at all times.
 - (2) Operators must resubmit a complete fire safety approval application if any proposed design or equipment change alters their vehicle's approved fire safety configuration. Any reconfiguration, replacement or addition of equipment shall be considered an alteration to a vehicle's fire safety configuration, except that the replacement of a piece of equipment with an identical make, model and configuration of the same or more recent production shall not be considered an alteration.
 - (3) Digital pictures of all flammable materials and propane and natural gas safety systems in their current working configuration should be submitted with every subsequent license renewal to the CFD.
 - (4) Fire safety approvals shall expire upon expiration of the mobile food vendor license.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





Part II - Mobile Food Vendors

Rule 4. Fire safety requirements.

- (A) In addition to the requirements set forth in Rule 3, the following apply to mobile food vehicles with a generator, propane, compressed natural gas or a fire suppression system:
 - (1) To be considered in proper working order, mobile food vehicles must adhere to the below specifications and approved fire safety plans and be supervised by a person possessing a CFD approved propane/natural gas handling certification at all times. A fire safety permit application and subsequent inspections must demonstrate compliance with these specifications.
 - (2) Propane and natural gas tanks. Only U.S. DOT-approved models of propane and natural gas tanks (49 CFR 178) may be used on mobile food vehicles. Tanks must be properly labeled with prominent safety placards in accordance with U.S. DOT regulations (49 CFR 178). Tanks must be equipped with a regulator as prescribed by NFPA 58—6.23.4 and 5.2.15. No quick-connect devices (as defined in NFPA 58—7.2.2.5) are allowed, except on chassis-mounted tanks. Any such quick connect devices on chassis mounted tanks must be equipped with a manual shutoff.
 - (3) Manufacturer specifications. Mobile food vehicle operators must follow manufacturer specifications and best practices for their vehicle as configured in their fire safety permit, especially with respect to weight distribution of the vehicle.
 - (4) Mounting and placement of propane and natural gas tanks. The mounting of propane and natural gas tanks must withstand impact equal to four times the weight of the filled propane or natural gas container according to NFPA 58—6.23.3.4. Tanks must be secure (NFPA 58—5.2.4) and conform with NFPA standards relating to the safe mounting of tanks as described in NFPA 58—6.23.3.3. Under these guidelines there are three permitted mounting options for propane and natural gas tanks:
 - (a) Outside mounted in a semi-enclosed cabinet, with vents at the top and bottom to facilitate the diffusion of vapors, vapor-tight to the interior of the vehicle, with a weather-protected regulator and a leak indicator as described in NFPA 1192— 6.4.8.
 - (b) Outside mounted, secured on top and bottom and stabilized (e.g. with a strap), vaportight to the interior of the vehicle, mounted no less than 28" above the ground with a weather-protected regulator.
 - (c) Chassis mounted, according to NFPA 58—6.23.3.4 No gas tanks are permitted to be installed on the roof of the vehicle under any circumstances. In addition, no flammable liquids are permitted to be stored inside the vehicle. Such liquids can only be stored in their own separate container in a manner consistent with propane and natural gas mounting specifications.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





- (5) Cooking equipment. All cooking appliances must be listed by Underwriters Laboratories or NSF International for mobile applications for the appropriate fuel and be clearly marked with the appropriate rating sticker. All fat fryers must have a lid over the oil vat that can be secured in order to prevent the spillage of cooking oil during transit. This lid must be secured at all times when the vehicle is in motion.
- (6) Propane and natural gas usage. Propane and natural gas tanks must be shut off while the mobile food vehicle is in motion, unless the tank is equipped with an impact detection shutoff device approved by the U.S. DOT. Propane and natural gas tanks must always be shut off while the vehicle is unattended and/or in overnight storage.
- (7) Automatic and manual shutoffs. Each gas-fired appliance must be equipped with an automatic device designed to shut off the flow of gas to the main burner and pilot in the event the pilot flame is extinguished (modified from NFPA 58—5.20.7A). The main system shutoff valves located on or closest to the fuel tanks and sufficient to stop the supply of fuel from all fuel tanks must be clearly marked with the words "PROPANE AND NATURAL GAS SHUTOFF VALVE" permanently affixed to the outside of the vehicle in reflective decal material with letters 2" high at minimum.
- (8) Fire suppression system and extinguishers. All mobile food vehicles must be equipped with a working R103 or K Class automatic fire suppression system according to NFPA 96—10.2.1 and 10.2.2, which is regularly maintained according to NFPA 96—11.2.1 for the lifetime of the vehicle. All vehicles must also be equipped with no less than one 10 BC-rated fire extinguishers, or, if a deep fryer is present in the vehicle, a Class K fire extinguisher. Extinguishers must have current annual inspection tags as outlined by NFPA 10 and Municipal Code of the City of Chicago.
- (9) Kitchen exhaust hood. Each mobile food vehicle that uses propane or natural gas for cooking must be equipped with a Type I or Type II commercial kitchen exhaust hood as defined by Chapter 18-28, Article 5 of the Mechanical Code of the City of Chicago. Exhaust hoods must be inspected semi-annually by a licensed HVAC professional to ensure continuing maintenance and upkeep.
- (10) Ventilation system. The truck must be equipped with a working ventilation system that meets the requirements of NFPA 96, Chapter 5. This ventilation system must be in operation at all times when the cooking equipment of the truck is being used. All fan systems in the cooking area of the truck must have minimum-combined cubic feet per minute rating equal to twice the volume of the interior of the truck as measured in cubic feet.
- (11) Detection systems. All mobile food vehicles must be equipped with a working carbon monoxide detector that meets standards set forth in NFPA 1192—6.4.6. All cabinet mounted tanks must be equipped with a leak indicator according to NFPA 1192—6.4.8.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





- (12) Piping. All propane and natural gas piping must be constructed and installed in accordance with NFPA 58—6.23.5. All propane and natural gas pipes and fixtures must be made of steel, copper or brass; no plastic piping for such purposes is permitted.
- (13) Electrical appliances and generators. All electrical equipment and appliances must be installed in accordance with NFPA 70. Only "in-line" electrical generators that are powered by a hard-lined, manufacturer-installed fuel line taken directly from the vehicle's main fuel tank may be used. All other types of generators, including, but not limited to portable stand-alone and separate-fill generators may not be used.
- (14) Certificate of safety. All mobile food vehicles with a GWR of 8,000 pounds or greater must obtain and keep current a Certificate of Safety as issued by the Illinois Department of Transportation in accordance with state law (625 ILCS 5).
- (15) List of required warning labels, placards and tags. The following placards and tags, some of which have been mentioned elsewhere in these specifications, must be prominent and visible on the interior or exterior of the mobile food vehicle as appropriate. All signs must conform to U.S. DOT guidelines as outlined in the North American Emergency Response Guide or successor publication, or specific organizational requirements outlined here.
 - a OSHA-approved propane or natural gas 3-in-1 hazard sign placed on the outside of the vehicle as close to the tank as possible, which should include no smoking warnings in both English and Spanish.
 - b Shutoff valve markers as outlined in subpart 7 of this section.
 - c Current annual inspection date tags on fire extinguishers.
 - d UL or NSF International certification sticker for mobile applications and proper fuel source on every cooking appliance.
- (16) At least one person who has successfully completed the Fire Safety Class shall be present in the Mobile Food Vehicle at all times while the vehicle is in operation.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





Part II - Mobile Food Vendors

Rule 5. Propane and natural gas handling requirements.

(A) In addition to the requirements set forth in Rule 3, the following apply to vehicles using propane or natural gas:

- (1) No mobile food vehicle may utilize more than 40 pounds of total propane. This standard will be judged by the rated capacity of propane tanks, and vehicles may utilize either one 40-pound tank or two 20-pound tanks. The same regulations apply for natural gas tanks.
- (2) Propane and natural gas cylinder refilling or exchange must be performed in accordance with NFPA 58, Chapter 7, by personnel who have been trained in accordance with Section 4.4. Cylinder exchange may be performed by only 1) a licensed propane and natural gas company operator or 2) mobile food vendor who has completed a CFD approved training course. Refilling or exchanging may take place at either a company gas facility or a commissary. Cylinders must be stored in accordance with Chapter 8 of NFPA 58. —14.3.
- (3) Owners and /or operators of mobile food vehicles, dispensers, or preparers will be held responsible for testing their propane and natural gas system for leaks with a UL Classified and Mine Safety and Health Administration (MHSA)-certified combustible gas detector at each instance of refill or exchange. Each Mobile Food Vehicle, dispenser and preparer is also required to have its own UL Classified (MHSA) certified combustible gas detector in the vehicle at all times. Owner will be held responsible for instruction and use of certified combustible gas detector. Such testing is to be completed and recorded before the vehicle leaves the commissary or facility premises. After refill or exchange, each propane and natural gas tank must be labeled with a proper handling tag by the operator or vendor, which must include the date of service and name of individual clearly marked.
- (4) At least one person who has successfully completed the CFD-approved Propane and Natural Gas Handling and Safety Course must be present at all times while the mobile food vehicle is in operation. This course shall train operators in applicable propane and natural gas handling best practices as outlined in NFPA 58, Chapter 7. Until permanent course certification procedures are established, the Propane and Natural Gas Handling and Safety Course must be administered by the CFD in consultation with the Illinois Propane Gas Association and Propane Education & Research Council. Mobile food vendors must retain certification paperwork in their vehicle at all times.

^{**}Mobile Food Vehicle Fire Saftey Specifications and Practices (continued on next page)**





- (5) Mobile food vehicles must be inspected by licensed propane professionals at least every 90 days. At every inspection, licensed propane professionals must produce a maintenance report. This report must be kept in the vehicle at all times. No mobile food vendor is allowed to operate their propane or natural gas system longer than 90 days after its last recorded maintenance by licensed propane professionals. Vendors are required to seek immediate maintenance in the event of a leak, fire or other safety incident. The vehicle cannot be returned to service until it has been inspected and certified by a licensed propane professional and a note made in the vehicle's maintenance record of that incident.
- (6) Maintenance records, and records of refilling and exchanging tanks shall be kept by the propane and natural gas company and mobile food vendor in accordance with NFPA 58—14.3.2.4 and 13.3.2.5. An up-to-date copy of all service and maintenance records must be kept in the mobile food vehicle at all times and must be made available to health or fire inspectors upon request.
- (7) All propane cylinders are required per NFPA 58 to be qualified for continued service within 12 years after the date of manufacture. Owners are responsible for recording and displaying propane cylinder date of manufacture, water and LP capacity next to Mobile Food Vehicle Permit.





FIRE SAFETY PERMIT APPLICATION SAMPLE

Applicant and Vehicle inf	ormation:			
MOBILE FOOD VEHICLE	SUPPRESSION SYSTEM	1 PLAN REVIEW APPROVAL DATE: _		
TASK FORCE (MFV) INSF	PECTION APPROVAL DA	ATE:		
BUSINESS NAME:		DATE:		
BUSINESS ADDRESS:		STATE, CITY, ZIP:		
OCCUPANT:		DL#:	ST:	
OCCUPANT ADDRESS:		STATE, CITY, ZIP:		
TELEPHONE #:		CELL PHONE #:		
IL. STATE CERTIFICATE C	OF SAFETY #:	PROJECT#:		
MFV LICENSE PLATE#:		IL DEPT. REV. ACCOUNT#	:	
COMMISSARY /SERVICE LOCATION:				
	Application (Continued on Next Page		
Fire Department Use Only: FIRE SAFETY PERMIT#:				
Action (select):	☐ Approved	☐ Declined and Returned w	ith Comments	
		Signed,		
		Charles R. Roy		
		Deputy Fire Commissioner, Fire	Prevention Bureau	
		Chicago Fire Department		
		Date:		





PERMIT APPLICATION INSTRUCTIONS

This permit application should only be filled out AFTER a vehicle passes an in-person safety inspection jointly conducted by the Fire and the Health Departments. Remember, after having your consultation with BACP, the subsequent steps in this process are to submit vehicle plans to the Fire Prevention Bureau, then obtain inspection, and finally submit this form. See also the Chicago Fire Department Mobile Food Vehicle Fire Safety Regulations and Mobile Food Vehicle Inspection Checklist for more information and vehicle specifications. Please add attachments as necessary.

Fill out ALL sections below, including any necessary attachments

a.	Safety Licensing information for all employees that will handle propane LP/CNG:
	LP/CNG Safety class was taken on:
	NAME:
	NAME:
	NAME:
	NAME:
b.	Detailed diagrams {preferably three-dimensional computer-aided drawings} of the propane, natural gas and fire suppression system and vehicle layout from no fewer than four different perspectives, including a top-view layout and an interior cut-away drawing of the food truck equipment mounted along each wall:
	Date of Submittal to Health, Fire Prevention:
c.	Number of Propane tanks:
	Size of Propane tank:
	Location and model of propane tank:
d.	Number, size, location, year of production, make and model of each propane appliance:





Location and model of all electrical equipment:			
Location and size (Amps/Voltage) of In-line generator solidly mounted on the MFV:			
NOTE: Stand alone or separate fill gasoline powered generators are not permitted on MFVs.			
Location, size, make, model and installer of fire suppression system:			
Location, size, make, model and installer of exhaust hood:			
Location, total CFM output, make, model and installer of ventilation system:			
Location and type of all flammable liquids and other fire hazards:			





j. Picture of vehicle tire and loading placard located within drive/s doorframe and a picture of certified scale ticket for the vehicle obtained from a weigh station as finally configured

:he
of the than initial
ent of
th:





Figure 1MFV SUPPRESSION CHECKLIST



CHICAGO FIRE DEPARTMENT BUREAU OF FIRE PREVENTION



MOBILE FOOD VEHICLE – SUPPRESSION SYSTEM CHECKLIST

The following information MUST BE INDICATED ON THE PLANS being submitted to the Fire Department, Fire Prevention Bureau for review. AT LEAST TWO (2) PLAN/BLUEPRINT COPIES ARE REQUIRED.

BASIC INFO: PLANS/BLUEPRINTS

- ✓ MFV OWNER'S NAME
- ✓ MFV OWNER'S ADDRESS
- ✓ MFV COMPANY NAME
- ✓ MFV OWNER'S PHONE NUMBER
- ✓ MFV MAKE & MODEL
- ✓ MFV VEHICLE IDENTIFICATION NUMBER

DESIGNER'S INFO: PLANS/BLUEPRINTS

- ✓ COMPANY NAME
- ✓ COMPANY BUSINESS NUMBER
- ✓ COMPANY CONTACT PERSON
- ✓ CONTACT'S QUALIFICATIONS
- ✓ CONTACT'S DIRECT NUMBER

PLANS/BLUEPRINTS

- ✓ 2 DIFFERING PLAN VIEWS
- ✓ OVERHEAD PLAN VIEW SHOWING:
 - ALL COOKING EQUIPMENT
 - NOZZLE PLACEMENT
- ✓ ELEVATION VIEW (SECTIONAL VIEW) SHOWING:
 - ALL SYSTEM COMPONENTS
 - HEIGHT OF NOZZLES ABOVE COOKING EQUIPMENT
- ✓ SHOW NOZZLES PROTECTING THE DUCT
 AND PLENUM SPACES
- ✓ SHOW THE LOCATIONS OF THE

 DETECTORS/FUSIBLE LINKS ALONG WITH

 THE TEMPERATURE RATINGS FOR EACH

 Output

 Description

 The Temperature Ratings for Each

 Output

 Description

 Descrip
- ✓ SHOW THE EMERGENCY PULL STATION
- ✓ SHOW THE AUTOMATIC GAS SHUTOFF VALVE

ADDITIONAL INFORMATION REQUIRED: PLANS/BLUEPRINTS

- ✓ CYLINDER:
 - INDICATE THE SIZE AND THE EXTINGUISING AGENT TO BE USED
 - LIST THE NUMBER OF FLOW POINTS ALLOWED AND THE ACTUAL NUMBER OF FLOW POINTS USED
- ✓ PIPING MATERIAL
 - LIST THE PIPING MATERIAL TO BE USED
 - MATERIAL TYPE AND WALL THICKNESS – MINIMUM SCHEDULE 40
- ✓ ADDITIONAL FIRE EXTINGUISHERS
 - A CLASS K ALONG WITH A MULTIPURPOSE FIRE EXTINGUISHER MUST BE IN MFV
- ✓ FRYER LID
 - IF FOOD TRUCK HAS A FRYER, IT MUST HAVE A LID COVERING THE FRYER WHILE VEHICLE IS IN MOTION

MUST ALSO INCLUDE WITH YOUR SUBMITTAL:

- ✓ EQUIPMENT CUT-OUT SHEETS/SPECIFICATIONS
- ✓ BASIC DESIGN INFORMATION FROM THE DESIGN MANUAL THAT DETERMIUNED THE NUMBER, TYPE AND LOCATION OF NOZZLE TO BE USED TO MPROTECT A COOKING APPLIANCE OR DUCT OR PLENUM SPACE
- √ \$150.00 PROCESSING FEE
 - CHECK OR MONEY ORDER PAYABLE TO THE CITY OF CHICAGO DEPARTMENT OF REVENUE