Mobile Food Truck Regulation: Developing a Recipe for Success

Presented by:

Ronald Farr
Lead Regulatory Engineer
UL-LLC

R.T. Leicht
Chief Fire Protection Specialist
State of Delaware

Jacqueline Wilmot
Fire Protection Engineer
NFPA
Mobile Food Trucks

Source: Westport Flea market

Source: Prestige Food Trucks of Orlando

Source: Maximum/Minimum Food Truck

Source: California Pizza Kitchen

Source: UrbanCincy

Source: Bloomberg Business
Mobile Food Trucks
Mobile Food Trucks

Source: The WOKmobile
Mobile Food Trucks

Source: eBay
Mobile Food Trucks
Mobile Food Trucks

Source: www.rollingkitchens.com
Hazards

• Multiple Propane Cylinders
• Compressed Gases
• High Voltage Electricity
• Hot Fryer Oil
• Grills
Recent Events

Frites N' Meats
When: April 2011
Where: NYC
Event: Food truck crash
West Side Highway
Result: 1 worker hospitalized for burns and bruises

Bastrop Homecoming Rodeo
When: August 2013
Where: Austin, TX
Event: Propane Tank Explosion
Result: 1 workers hospitalized for burns

Canadian National Exhibition
When: August 2012
Where: Toronto
Event: Propane Tank Explosion
Result: 0 injured

Fresno Christian High School
When: September 2013
Where: Fresno, CA
Event: Propane Tank Explosion
Result: 2 hospitalized, 1 injured

Bossman Pitstop BBQ
When: June 2014
Where: Southeast Memphis, TN
Event: Propane Tank Explosion
Result: 0 injured

Philly Food Truck Explosion
When: July 2014
Where: Philadelphia, PA
Event: Propane Tank Explosion
Result: 13 injured, 2 deaths

Colfax Avenue Explosion
When: September 2014
Where: Denver, CO
Event: Propane Tank Explosion
Result: 1 employee with facial burns

Deep Fat Fryer - Venice
When: August 2014
Where: Venice, CA
Event: Deep Fat Fryer
Result: 0 injured

Driveway Explosion
When: March 2015
Where: Lakeville, MN
Event: Propane Tank Explosion
Result: 0 injured

Taco Truck Explosion
When: June 2015
Where: Indianapolis, IN
Event: Propane Tank Explosion
Result: 4 injured, 2 critical
La Parrillada Capina Food Truck Explosion

Source: Fox News - Philadelphia
Mobile Food Truck Locations
Gap In Safety Inspections & Standards
Actions Taken To Close The Gap

Submitted Public Input

NFPA 96
• Fall 2016 Revision Cycle
• PI Accepted until Jan. 5, 2015
• Will Review in May of 2015
• Look for update in Sept. 2015

NFPA 1, Fire Code
• Annual 2017 Revision Cycle
• PI Accepted until July 6, 2015
• Will Review in Fall 2015
• Look for update in January 2016
New Chapter  Mobile Cooking Operations

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.
Proper use of portable fire extinguishers and extinguishing systems
Proper method of shutting off fuel sources
Proper procedure for notifying the local fire department
Proper refueling
How to perform leak detection
Understand hazards associated with cooking

Gas systems on mobile cooking vehicles shall comply with NFPA 58
Gas systems shall be inspected prior to each use by a worker trained in accordance with 16.1.8 training.
Leak detection shall be performed every time a new connection or a change in cylinder is made to any gas system.
Committee Scope: This Committee shall have primary responsibility for documents on fire safety in the design, installation, and use of exhaust systems (including hoods, grease removal devices, exhaust ducts, dampers, air-moving devices, and auxiliary equipment) for the removal of products of combustion, heat, grease, and vapors from cooking equipment, including the application of associated fire extinguishing systems.

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.
Committee Scope: This Committee shall have primary responsibility for documents on a Fire Prevention Code that includes appropriate administrative provisions, to be used with the National Fire Codes for the installation, operation, and maintenance of buildings, structures, and premises for the purpose of providing safety to life and property from fire and explosion. This includes development of requirements for, and maintenance of, systems and equipment for fire control and extinguishment. Safety to life of occupants of buildings and structures is under the primary jurisdiction of the Committee on Safety to Life.
Committee Action on Public Input # 114:

• Resolved with a Committee Statement:
• A task group was formed to explore possibilities to add requirements on this issue in NFPA 96
• Task Group will report at the Second Draft Meeting which will take next spring.
Stay Tuned...
Thank you!

Any Questions?
CEUs: To receive CEUs for this session, scan your badge at the back of the room before leaving.

Evaluation: Complete a session evaluation on the mobile app. (Search app store for ‘NFPA 2015 C&E.’)

Handouts: Handouts will be available via the mobile app and at nfpa.org/conference.

Recordings: Audio recordings will be available. To order, see Fleetwood Media Productions (at Registration desk) or visit nfpa.org/conference.
Suddenly, food truck fire safety issues are making their presence felt in communities across the country. Meanwhile, the technical committee for NFPA 96 considers a new chapter designed to address those issues.

By Jesse Roman

made food truck fire safety impossible to ignore. “It made everyone more concerned, because they could see on video just how damaging an event like this can be.”

Jacqueline Wilmot, the staff liaison for NFPA 96 and a Philadelphia native, said the La Parrillada Chapina incident made food truck fire safety impossible to ignore. “It made everyone more concerned, because they could see on video just how damaging an event like this can be.”

R.T. Leicht, the chief fire protection specialist for the state of Delaware, was on a beach vacation with his family when the explosion occurred. Leicht was also the technical committee chair of NFPA 96, Ventilation Control and Fire Protection of Commercial Cooking Operations, at the time, and he learned of the blast a day later when Steven Sawyer, a senior fire service specialist at NFPA, sent him an email to ask if the committee should take a new look at a previously proposed food truck fire safety standard in light of the Philadelphia explosion.

“Right away I started Googling and saw the explosion on my computer screen,” said Leicht, who is also the past president of the International Fire Marshals Association (IFMA). “It made the airwaves and people started talking. … Before that, it didn’t seem like anyone had much of an interest in the problem.”

IT’S OFTEN THE CASE in the public safety world that a single tragic moment does more to crystalize a problem than any amount of discussion ever can.

For food truck safety, that moment came on the morning of July 1, 2014, in the Feltonville neighborhood of Philadelphia. Gas from a leaking propane tank on the La Parrillada Chapina food truck ignited, resulting in an explosion that sent a fireball 200 feet into the air, shook nearby buildings, and shot the propane tank 95 feet into a neighboring yard. Truck operators Olga Galdamez, 42, and her daughter, Jaylin Landaverry-Galdamez, 17, suffered third-degree burns and died three weeks later. Ten other people were injured in the blast, some critically.

This incident wasn’t the first time a food truck had exploded in public, but it was different in one key way—it was caught on video by a nearby surveillance camera. The shocking video quickly spread across the Internet, and media outlets across the country began asking the same questions: “Are food trucks safe?” and “Could this happen here?”

nfpa.org/foodtrucks

Watch a video of the La Parrillada Chapina food truck explosion in Philadelphia.

Read more about the revision process for the 2017 edition of NFPA 96.

CONFERENCE SESSION

Mobile Food Truck Regulation: Developing a Recipe for Success

Wednesday, June 24, 9:30 a.m.

Jacqueline Wilmot, NFPA; R.T. Leicht, Delaware State Fire Marshal’s Office; Ronald Farr, Underwriters Laboratories

For updated information on education sessions at the 2015 Conference + Expo in Chicago, visit nfpa.org/conference.

Photographs clockwise from right: Shutterstock, Shutterstock. All other photographs, iStockphoto.
Shortly after the event, IFMA convened a task force to put together a proposal for a new chapter of NFPA 96 specifically addressing food truck fire safety. The new language was submitted to NFPA last December, and the NFPA 96 technical committee will review it in May for possible inclusion in the 2017 edition of the standard.

Leicht, Wilmot, and Ronald Farr, an engineer at Underwriters Laboratories, will discuss the issue in an education session at the upcoming NFPA Conference + Expo in Chicago.

“Right now there is no national standard that specifically addresses these issues,” Leicht said. “Every city is just doing what it thinks is best. Some are nervous about fire safety, and so it just don’t make the evening news.”

Growing pains

Across the country, the popularity of food trucks is soaring. Matthew Geller, the Santa Monica-based founder and president of the National Food Truck Association, estimates there are at least 117,000 food trucks operating in the U.S., their popularity rising along with the country’s thriving “foodie” culture. The recession also contributed, Geller said, causing chefs to look for cheaper start-up alternatives to brick-and-mortar restaurants and consumers to seek out better dining values. According to IBISWorld, a business analysis firm, food truck industry revenue grew an average of 9.3 percent each year from 2010 to 2015, to an estimated $857 million last year.

Regulation has been one of the pain points for the industry, Geller said. Because the rules are made and enforced at the local level, there are about as many different regulations governing the industry as there are food trucks on the road. Truck operators face a menagerie of rules about how to prepare and serve food, where they can park, what permits they need, how often they’re inspected—and all of it can change the second a municipal boundary is crossed.

Fire protection regulations are no different; the rules run the gamut from very comprehensive permitting processes to absolutely no oversight or rules. In Chicago, in addition to submitting fire protection plans and having to pass a lengthy inspection, all food truck owners are required to pass a fire safety class. On the other end of the spectrum, in Indiana, state law bans fire departments from even inspecting food trucks, because they are considered vehicles, Indianapolis Fire Marshal Chief Courtney Gordon said in the wake of the Philadelphia explosion.

“Get uncomfortable with national standards because, quite often, it hurts regional advocacy,” he said. “But if a bunch of fire professionals got together to create something smart, that would be the one place where I could say that would be great. At least it would create some consistency in the industry, and when there is consistency there is safety. If a food truck blows up in Minnesota, that affects us here in California.”

The problem

Most food truck chefs cook using either gas or electricity. While small fires can and do ignite because of the stove, oven, and fryer, the fuel sources have the most potential to cause destruction, injury and death. A standard 20-gallon propane tank has the same explosive capability as 170 sticks of dynamite, Leicht said. Some trucks in unregulated jurisdictions carry propane tanks in excess of 100 gallons. Gas generators can also be dangerous. Because propane gas is heavier than air, an undetected leak can seep out and pool in pockets and crevasses inside and outside the truck.

“If you’re cooking all day with all sorts of smells, you won’t necessarily notice when there is a leak, and you won’t know you’re standing in a pool of propane,” Leicht said. At that point, one spark from the stove or oven can cause disaster. This is what happened in the Philadelphia explosion, a local fire marshal’s investigation concluded.

Although explosions like the one in Philadelphia are rare, they are not unheard of. In 2011, two workers were burned when a propane tank on a New York City food truck exploded after a car accident. In 2012, a propane tank exploded on a food truck in Canada, causing $30,000 in damage. In 2014, three people in Fresno, California, were injured when a food truck exploded at a high school football game. In March, a food truck exploded in a driveway in Lakeview, Minnesota, damaging 20 houses. The blast could be heard six miles away, according to news reports.

According to an NFPA report released in February 2014, between 2007–2011 there were an average of 540 vehicle fires each year where propane was the material first ignited. These fires accounted for an average of three deaths and $8 million in property damage annually. There’s no
The department formed a committee that came up with what are widely regarded as the most comprehensive fire safety regulations for food trucks in the nation. All Chicago mobile food vendors with a generator, propane, compressed natural gas, and/or fire suppression hood are required to obtain a fire safety permit. To do that, food truck operators must file with the city detailed drawings of the truck’s fire suppression system; pass a fire inspection; always have a person on board the truck who is trained by the city of Chicago in handling and exchanging propane tanks; have all employees attend a fire safety class; maintain a combustible gas detector for daily readings on the truck; and comply with the city’s Mobile Food Vehicle Safety Specifications and Practices, which were developed largely from language in NFPA 58, Liquefied Petroleum Gas Code. Each truck must also be outfitted with a GPS tracking device so the fire and health departments can quickly locate a truck and respond in case of an emergency.

Frequent drop-in inspections are not uncommon, Ford said. The department is also now looking into requiring trucks to carry gas detection devices to allow them to check for gas leaks every time the truck is moved. Chicago food truck operators have bristled at some of these rules, especially the GPS requirement and a non-fire related regulation that requires them to park at least 200 feet away from brick-and-mortar restaurants. Some complain that certain fire regulations, such as requiring hard-lined fuel lines instead of the cheaper rubber lines, adds cost and cuts deep into their already slim profits. But Ford isn’t apologizing.

“This is all about safety,” he said. “We’re not trying to harm the industry at all. We just want it to be safe for owners and operators and the public.”

The lack of a national consensus standard has caused other cities to look to Chicago for guidance on developing rules about food trucks. Ford said that municipalities from all over the country have called asking for copies of Chicago’s Fire Safety Permit Consultation Package, and he gladly gives it out and offers advice. Those calls have only increased over the last couple of years, and it’s time for NFPA to weigh in, Ford said.

“We need something nationwide, something that will provide a basic level of safety throughout the county,” he said.

Leicht, who still sits on the NFPA 96 technical committee, agrees that an NFPA national consensus standard on food truck fire safety would go a long way toward decreasing the number of communities that have no fire regulation of any kind. Part of the reason is that many communities don’t have the expertise or know-how to create fire-permitting regulations on their own, he said.

“Communities would adopt it because it’s there—they don’t have to reinvent the wheel, because it’s already been written,” Leicht said, speaking from some experience. “We don’t have a standard dealing with food trucks in Delaware at the moment, but if there was a national standard that addressed it, we probably would.”

JESSE ROMAN is staff writer for NFPA Journal. He can be reached at jroman@nfpa.org.