



# NIH Division of the Fire Marshal

## Administrative Interpretation 19-1

### Hazardous Work Program

**Code reference:** NFPA 1 (2018), NFPA 51B (2019)

**Background:** Hazardous work includes NFPA 51B hot work and certain NFPA 1 hazardous equipment and processes. This interpretation summarizes the NIH program of prevention and protection for hazardous work on NIH-owned facilities. Built-in cooking and heating equipment is covered by the NIH Manual Chapter 1370 building permit process.

#### **Interpretation:**

1. Hazards not allowed on NIH-owned facilities: portable heaters prohibited by Administrative Interpretation 17-7, cooking equipment prohibited by Administrative Interpretation 17-8, sky lanterns, decorative torches, fire pits, and recreational fires. Smoking is prohibited on the Bethesda campus.
2. Hazardous work, equipment, and processes covered by this interpretation:
  - a. NFPA 51B hot work, including welding, soldering, cutting, brazing, and grinding
  - b. Open flame or heat-producing equipment not listed in 1. above, including fuel-fired salamanders and tar kettles
  - c. Portable open flame cooking or recreational devices, including BBQs, portable stoves, and food-warming equipment except those at 15 group residences
  - d. Food service trucks and trailers with cooking or warming equipment
3. Hazardous Work Permit process (also see flow chart below):
  - a. All hazardous work on NIH-owned facilities requires a Hazardous Work Permit
  - b. If work involves shutdown of fire protection systems, submit shutdown request in advance to allow review and approval prior to hazardous work.
  - c. Request hazardous work permit by calling 301-496-0414
  - d. Requestor must provide name, company, phone number, work type, work location, meeting place, and status of shutdown request (if needed)
  - e. Prior to the start of work or cooking, the site will be inspected
  - f. The Division of the Fire Marshal (DFM) inspects the site and issues permits on weekdays, typically from 6:00 AM to 3:00 PM

- g. After hours, the phone number above is forwarded to the NIH Fire Department, who may issue permits only if the work is of an emergency / urgent nature
  - h. After-hours permits can be requested in advance from DFM during weekdays. Permits will be issued only when the work area is fully compliant during the inspection and must remain compliant during the work
  - i. Permits will be good for a maximum of 24 hours (30 days with project number)
4. Hazardous work requirements to be followed by entity doing work or cooking:
- a. The issued hazardous work permit must be posted at the site in plain view
  - b. Hot work must meet the requirements of NFPA 51B and the issued permit
  - c. Other hazardous work must meet NFPA 1 and the issued permit
  - d. Fire watches meet DFM Administrative Interpretations 17-3 and 19-2
  - e. Follow shutdown procedures for any affected fire protection system
  - f. Provide fire extinguisher(s) of appropriate type(s) for the hazard(s) present. Contractors are responsible to provide their own extinguishers
  - g. Report any fires, hazardous materials spills, or other emergencies to the Fire Department (Bethesda campus 911 from land line or 301-496-9911 from cell) even if the fire appears to be out or the emergency mitigated.
  - h. If an NIH fire extinguisher is used in an emergency, contact the NIH Fire Department at 301 496-2372

**Supersedes:** Administrative Interpretation 18-2, dated 7/10/18

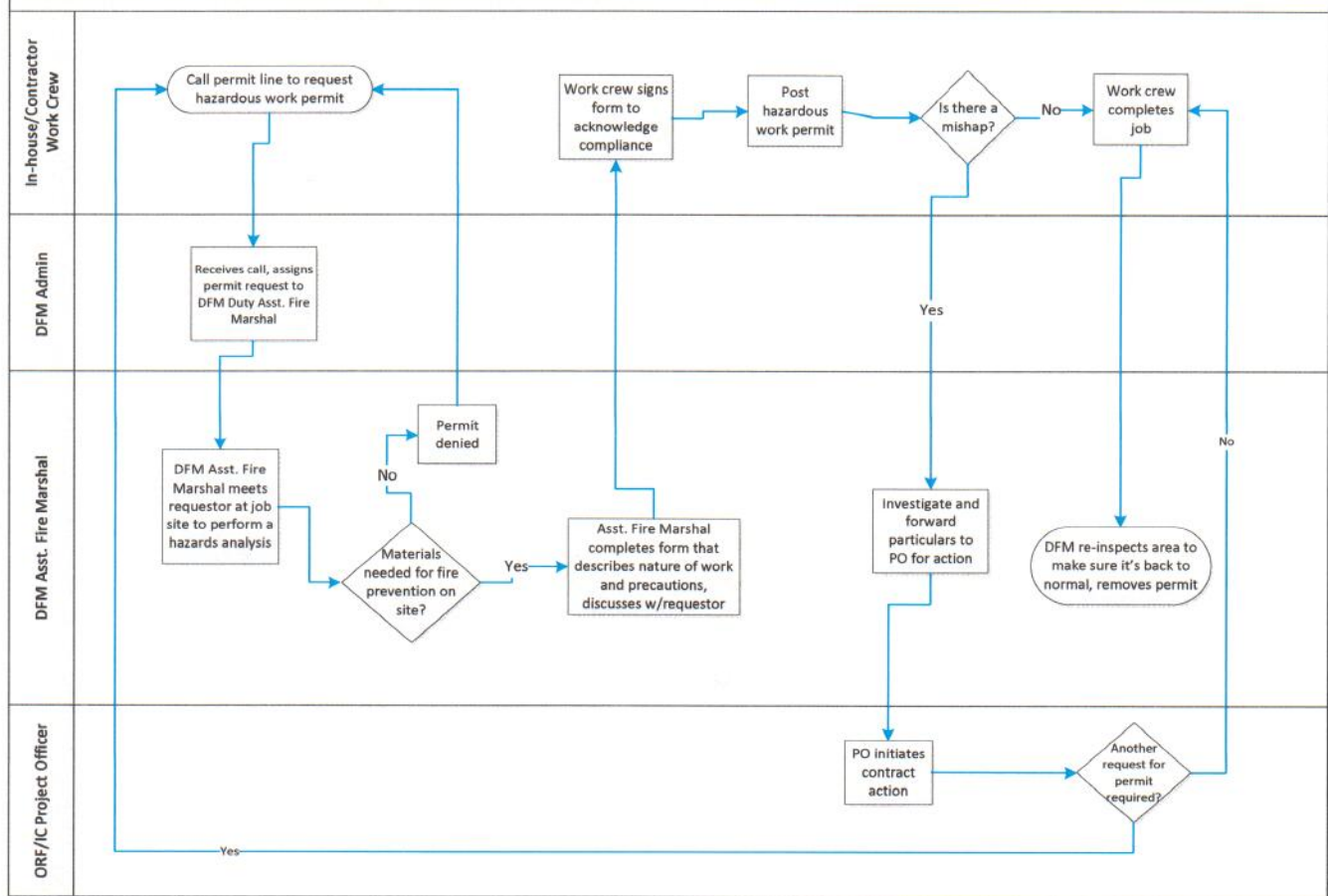
**Prepared by:** Fire Marshal M. Chibbaro, P.E.

**Date Issued** 6-12-19 **Fire Marshal** M. I. Chibbaro

**Hazardous Work Permit Process**

**Output:** Completed work permit form to ensure safe work and not have the fire dept. respond needlessly

(This process only applies M-F, 6am-3pm, excl. government holidays, closures due to weather, etc. Permit requests outside of this time frame are handled by the NIH Fire Department.)



## Hot Work Checklist

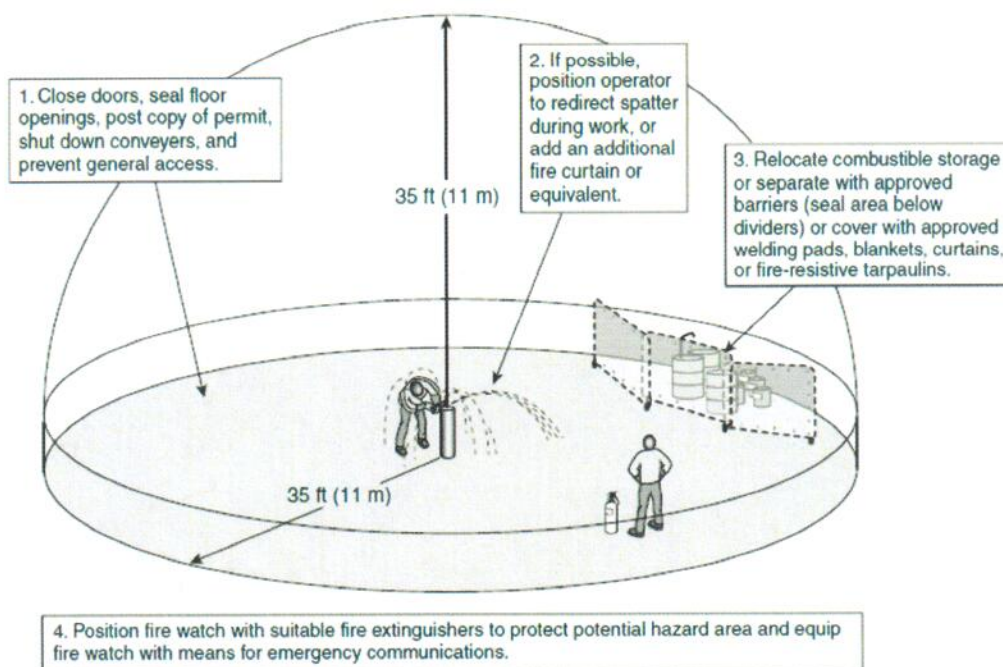
The following items, as applicable, will be checked by the DFM representative inspecting hot work sites for conformance with NFPA 51B. These items will be discussed at all pre-construction meetings.

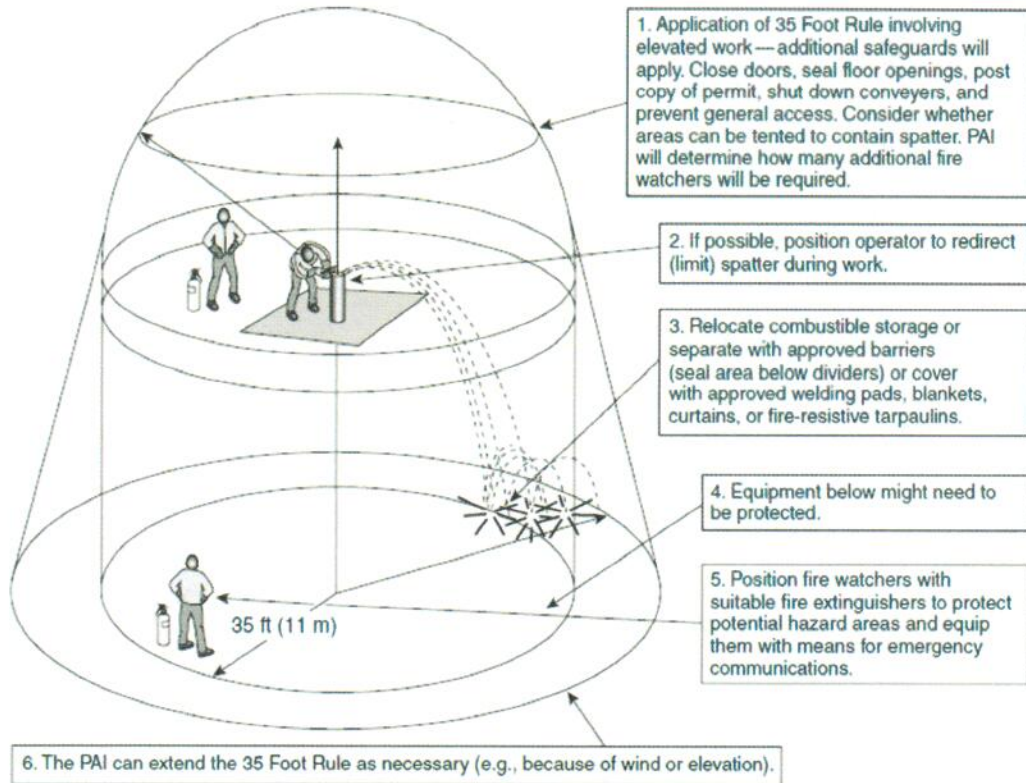
- Fire protection system shutdown request is approved and followed
- Fire watch program and procedures are followed (DFM Administrative Interpretations 17-3 and 19-2)
- Multiple fire watchers as needed below roof work, opposite nearby walls, etc.
- Escape routes are available to workers and fire watchers
- Floors are swept clean and trash is removed
- Combustibles or hazardous chemicals within 35 ft. are removed or protected
- The 35 ft. perimeter is enlarged for overhead work, windy conditions, or other situations where sparks can travel further
- Covering or protecting of floor / wall penetrations, conveyors, and ducts
- Covering of fire protection equipment
- Isolation of hot work with approved shields, welding blankets, and/or curtains
- Condition of welding/soldering/cutting/brazing/grinding equipment
- Appropriate clothing for workers
- Fire extinguisher(s) of appropriate type(s) for the hazard(s) present must be provided by the contractor (units allocated for the building may not be used)
- At least one fire extinguisher must be 10 lb. multi-purpose (ABC) dry chemical type
- All fire extinguishers are charged and located appropriately
- All Fire extinguishers have an up-to-date inspection tag from a certified fire extinguisher company or proof the unit is newly purchased
- Phone is available and emergency numbers are known
- Fire protection equipment/systems are returned to service after fire watch is terminated
- For construction projects, a binder of Safety Data Sheets for materials used on site is identified and accessible to the NIH Fire Department at all times
- Any other conditions and concerns specific to the site, work being done, combustibles present, or tools being used
- Copy of DFM approved Hazardous Work Permit is posted

DFM and Fire Department personnel will make referrals or deny hot work permits when safety procedures that are the responsibility of other designated NIH entities cannot be verified. Examples of such safety procedures are:

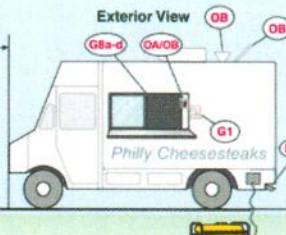
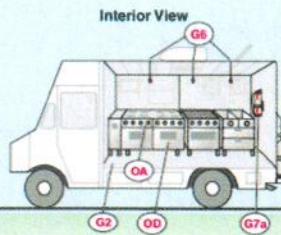
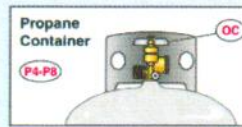
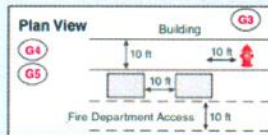
- Qualified personnel have certified the absence of explosive atmospheres or combustible dust accumulations
- Qualified personnel have certified the proper purging of flammable gases and liquids from vessels and piping
- Confined space permit is issued and conditions of the permit are followed in permit-required spaces

## NFPA 51B hot work diagrams provided for convenience





## FACT SHEET » Food Truck Safety



**NATIONAL FIRE PROTECTION ASSOCIATION**  
The leading information and knowledge resource on fire, electrical and related hazards

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 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. For more information, go to [nfpa.org/foodtrucksafety](http://nfpa.org/foodtrucksafety).

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## FACT SHEET » Food Truck Safety (continued)

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 Annex B in NFPA 96.

### GENERAL SAFETY CHECKLIST

- ❑ Obtain license or permits from the local authorities. [1:12.8(a)] **G1**
- ❑ Ensure there is no public seating within the mobile food truck. **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: [96:8.15.1] **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**

### 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] **F1a**
- ❑ Ensure that refueling is conducted only during non-operating hours. [96:8.18.3] **F1b**
- ❑ Check that any engine-driven source of power is separated from the public by barriers, such as physical guards, fencing, or enclosures. [96:8.16.2.2] **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 [96:8.13] **F4a**
  - ❑ At least 10 ft from every means of egress [96:8.13] **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] **F4d**
- ❑ Ensure that all electrical appliances, fixtures, equipment, and wiring complies with the NFPA 70®. [96:8.18] **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. [96:8.19.2.3] **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. [96:8.19.2.1] **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, 2015 Edition  
 NFPA 1 Fire Code Handbook, 2015 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

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