



NIH Division of the Fire Marshal

Administrative Interpretation 20-3

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. Mobile and Temporary cooking, previously covered in this program, is now covered by Administrative Interpretation 20-2.

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
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, the site will be inspected
 - f. The Division of the Fire Marshal (DFM) inspects the site and issues permits only from 6:00 AM to 3:00 PM Mondays through Fridays except Federal holidays.

- 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:
- 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 19-1, dated 6/12/19.

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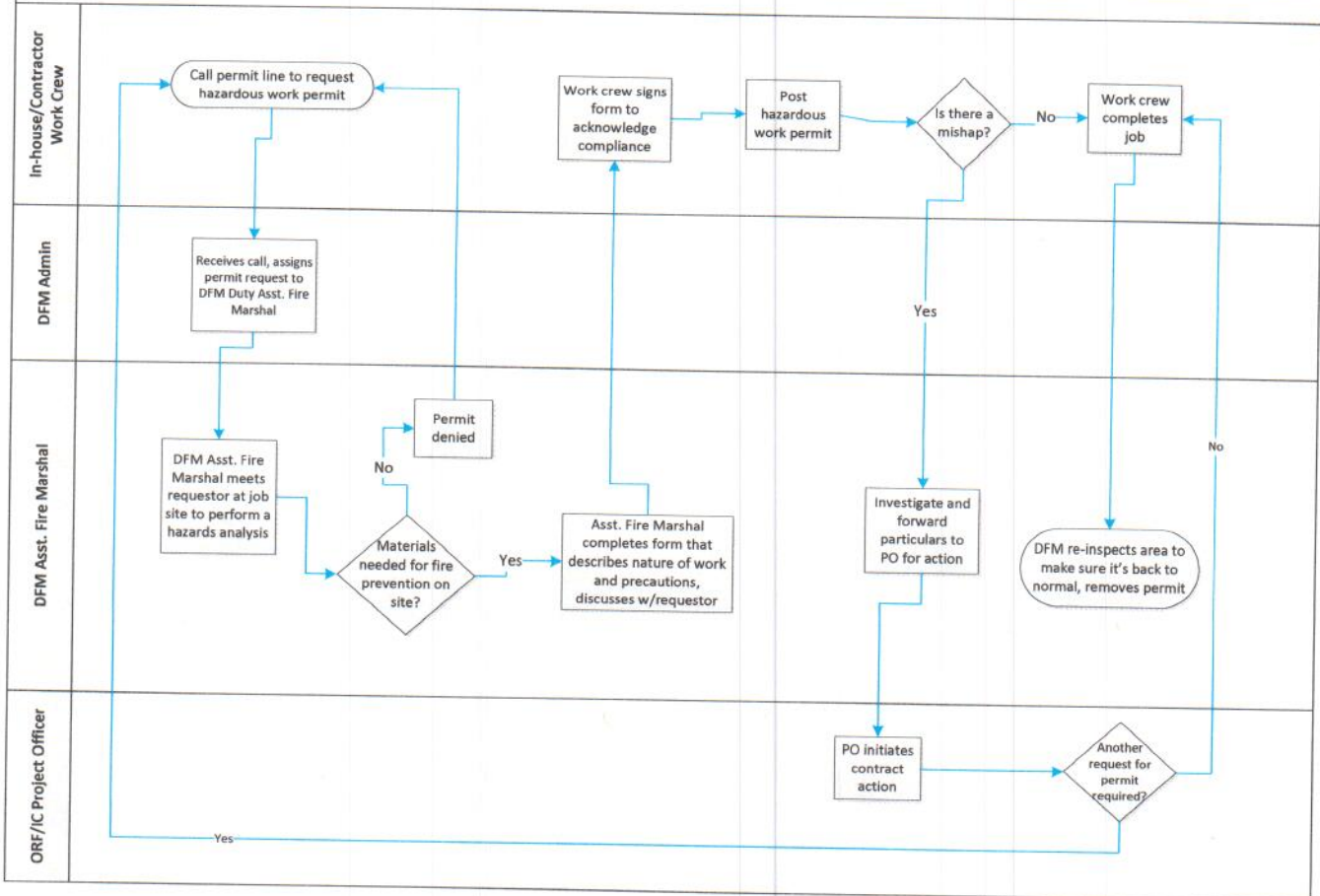
Date Issued 8/9/21 **Fire Marshal** M. I. Chibbaro

Note: originally issued 1/10/20. Revised to coordinate with 20-2, Mobile and Temporary Cooking

Hazardous Work Permit Process

(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.)

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



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

