

# SAFETY COMPENDIUM – HOT WORK

**Hot work** (cutting, welding using electric arcs or oxy-fuel gas flames, chipping, or grinding) presents a potential for fire and explosion and requires a hot-work permit. Hot work is maintenance work requiring the use of tools or equipment that generate sparks, flame, or heat. Hot work includes: Welding, cutting, burning, soldering, chipping, and grinding, and using portable equipment powered by internal combustion engines in hazardous areas subject to ignition.

- Hot work may never be performed when a sprinkler system is out of order or within 50 feet or less of exposed, readily ignitable material.
- Hot work may never be performed in a potentially explosive atmosphere, where the following materials are present:
  - Flammable gases, vapors, liquids, or ignitable dusts.
  - Tanks, drums, or containers that have not been decontaminated of flammable material.
- If hot work cannot be moved to a hot-work area, it may be performed in an area made fire safe by removing combustibles or protecting them from ignition sources.
- When performing hot work, comply with Chapter 5 of Handbook MS-56, Fire Prevention and Control.

Outside contractors who perform work on Postal Service premises, must comply with all hot-work safety procedures to protect themselves, other employees, and equipment.

- Fire protection and fire-extinguishing equipment must be readily available and located properly at the worksite before welding, cutting, or brazing activities can be performed.
- Adequate ventilation must be provided when welding is performed in small or poorly ventilated areas.
- Welding in confined areas is prohibited.
- Never burn or weld while sprinklers are out of order, unless other adequate precautions are taken.
- Welding anywhere other than in designated welding rooms, must comply with additional precautions.

If you are exposed to hazards from welding, cutting, or brazing operations, you must be protected with PPE.

- Wear adequate eye protection when within the protective curtain of welding operations.
- Wear goggles or helmets with the proper shade-numbered colored lenses when welding or cutting with gas, or performing electrical arc welding.
- Wear adequate eye protection when chipping slag from the weld.
- Protect your whole body from drippings and slag, especially when welding overhead.
- Use welding blankets, covers, and curtains when hazardous exposure warrants their use.

To protect everyone in a work area, welding screens must be in position when welding.

A fire watcher is an employee trained to spot fires quickly and to take appropriate action. The supervisor in charge of the hot work (inspector, maintenance supervisor, or other authorizing agent) must require the presence of one or more fire watchers when granting authorization for cutting and welding tasks.

- Firewatchers must be trained in the use of fire-extinguishing equipment; be familiar with the facility and the procedures for sounding an alarm in case of fire; watch for fires while burning or welding is taking place and for 30 minutes afterward (unless the supervisor in charge relieves them of the responsibility); watch for fires in exposed areas; try to extinguish incipient-stage fires; and sound the alarm immediately.
- A fire watch shall be maintained for at least a half hour after completion of welding or cutting operations.<sup>1</sup>

**Hot work permit** means the employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition. Prior authorization is not required for work performed in approved work areas, such as maintenance shops and welding rooms. In other work areas, any hot work (involving sparks, flames, or heat) done on the premises must be reported to your supervisor daily.

- A designated management representative (usually a maintenance supervisor) is required to inspect the work area before granting authorization for hot work.
- Someone with relevant expertise may be designated (by local directive) to be an authorizing agent in the absence of a maintenance supervisor.
- Whoever authorizes the hot work must indicate the precautions to be followed in a written, hot-work permit.
- The authorizing agent must send a copy of the hot-work permit to the safety officer.

Sources: EL-803, Maintenance Safety Handbook, Section II-G, and XVII; MS-56, FIRE PREVENTION AND CONTROL (TL-4, March 15, 2006); EL-803, Maintenance Safety Handbook, Section II-G, and XVII.

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<sup>1</sup> OSHA 1910.252 (a)(2)(iii)[B]