Hot Work Procedures

Purpose

The Hot Work reviewing process is established to prevent ignition of combustible and flammable materials from occurring. These guidelines follow the prescribed method outlined in ANSI Z49.1-1973 and fulfill the requirements of Cal/OSHA Title 8 §4848.

Scope

These guidelines apply to all CSUF departments and vendors/contractors who perform welding and cutting or similar activities involving spark, flame, or heat. These procedures shall not apply to cutting and welding operations that may be or become part of routine and normal processes. They are not applicable to construction sites under contractor control.

Responsibilities

The hot work review process shall be conducted by the representative of Physical Plant performing welding/cutting tasks. Project coordinators shall review welding/cutting work and locations proposed by vendors and contractors for applicability and shall be responsible for reviewing the Hot Work process for any safety discrepancies. The Hot Work Permit must be sent or delivered to EH&IS at least 72 hours before the beginning of the job.

Precautions

The following are general safety precautions required regardless of welding locations:

- Check valves, regulators, hoses, and torches regularly.
- Prohibit welding or cutting on vessels which contain combustible or flammable material unless completely purged and residue removed.
- Secure gas cutting and welding equipment to avoid damage and disturbance.
- Ensure that the atmosphere is free of flammable or combustible vapor, and should doubt arise, consult EH&S to determine if work should continue.

Approved Welding Areas

Areas which are not subject to a Hot Work review:

- Auto Shop (T 1000, Rm. 1001)
- Central Plant
- Outdoor areas free of combustible material (i.e., dry brush, grass, leaves)
Inspection of Non-Approved Welding Areas

Areas which are subject to a Hot Work review:

The individual performing welding or cutting shall ensure precautions have been taken as prescribed in Hot Work review process prior to commencing any work. The Hot Work review shall be completed by Physical Plant representative, EH&IS or a project manager prior to commencing any work in the non-approved areas. Only trained Physical Plant personnel are allowed to review the process. Precautions include but are not limited to:

- **Building systems:**
  - Protect building ventilation from smoke and fumes.
  - Disable fire alarms when necessary. See EH&IS Fire Watch Procedures whenever fire alarms are disabled.
- **Personnel/occupant protection:**
  - Use exhaust ventilation or other approved methods to protect occupants and workers from smoke, fumes, and toxic materials.
  - Install vision screens/barriers (applicable for outdoor approved locations also).
  - Follow Confined Space program requirements when applicable.
  - Follow Lockout/Tagout program requirements when applicable.
- **Within 35 feet of work:**
  - Remove combustible/flammable materials, dust, lint, and oily deposits.
  - Cover combustible floors with spark/heat shields (consider metal or damp sand).
  - Eliminate explosive atmosphere.
  - Cover fixed combustibles with fire resistive covers, guards, or shields.
  - Cover wall and floor openings with non-combustible covers.
  - Suspend fire-resistive covers beneath work to collect sparks.
- **Fire watch personnel must:**
  - Post a fire watch during hot work and for 30 minutes thereafter.
  - Search for and extinguish any smoldering or flaming ignition.
  - Be trained to use a 10 lb. ABC fire extinguisher.
  - Receive training in emergency procedures and contact numbers and locate the nearest fire alarm pull station before hot work begins.

Contracts and Vendors

Hot work activities conducted by the contractor or vendor shall be evaluated by a Physical Plant or Design and Construction representative for adherence to the Hot Work policy.

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