STANDARD OPERATING PROCEDURE

Hot Work Permit SOP

Document no.	SOP-CON-008
Revision	1.0
Owner	Site Safety Officer
Effective date	September 15, 2026
Review cycle	Every 12 months

1. Purpose

To prevent fires caused by welding, cutting, grinding and other hot work by requiring a permit, area preparation, fire protection and a dedicated fire watch.

2. Scope

Applies to all hot work performed on the construction site, including welding, flame cutting, grinding and brazing, in permanent and temporary work areas.

Definitions

Hot work	Any work that produces open flame, sparks or heat capable of igniting combustible material, such as welding, cutting, grinding or brazing.
Fire watch	A trained person assigned to watch for fire during hot work and for a period afterward, equipped with a fire extinguisher and able to raise the alarm.
Hot work permit	The signed document authorizing hot work in a specific location for a specific time, listing the precautions taken.

3. Responsibilities

Hot Work Operator	Requests the permit, prepares the area, performs the hot work safely and stops if conditions become unsafe.
Fire Watch	Monitors the work area for fire during hot work and for the required period afterward, holding a charged fire extinguisher.
Permit Issuer	Inspects the area, verifies precautions are in place, and signs the permit before work starts.
Site Supervisor	Coordinates hot work scheduling with other site activities and confirms the permit is closed out.

RACI matrix

Activity	Hot Work Operator	Fire Watch	Permit Issuer	Site Supervisor
Request the hot work permit	R/A	-	C	I
Inspect the area and remove combustibles	R	-	R/A	I
Approve and sign the permit	I	-	R/A	I

Activity	Hot Work Operator	Fire Watch	Permit Issuer	Site Supervisor
Monitor for fire during and after work	C	R/A	I	I
Close out the permit	R	C	A	I

R = Responsible, A = Accountable, C = Consulted, I = Informed

4. Materials and PPE

Materials, tools and systems

- Hot work permit form
- Portable fire extinguisher rated for the work area
- Fire-resistant welding blankets or screens
- Gas detector for confined or enclosed spaces
- Welding, cutting or grinding equipment appropriate to the task
- Hot work permit register

Personal protective equipment

- Welding helmet or face shield
- Flame-resistant clothing
- Welding gloves
- Safety boots
- Hearing protection for grinding

5. Procedure

Step	Task	Owner	Done
5.1	**Identify the hot work task** Confirm the planned task, such as welding, cutting or grinding, is classified as hot work and requires a permit before any equipment is set up.	Hot Work Operator	☐
5.2	**Inspect and prepare the area** Inspect the work area and relocate or cover combustible materials within the required clearance, and check for openings, cracks or gaps that could let sparks travel to an adjoining area. **Warning:** Never perform hot work near flammable liquids, gases or dust without eliminating the hazard first.	Permit Issuer	☐
5.3	**Request the hot work permit** Complete the permit application describing the task, location, time window and precautions in place, and submit it to the permit issuer before starting work.	Hot Work Operator	☐
5.4	**Inspect and approve the permit** The permit issuer inspects the prepared area against the permit checklist, confirms fire protection and fire watch are arranged, and signs the permit before work begins. **Checkpoint:** No hot work starts until the permit is inspected and signed by the permit issuer.	Permit Issuer	☐
5.5	**Position fire protection equipment** Place a charged fire extinguisher rated for the hazard within immediate reach of the work area, and set up fire-resistant blankets or screens to contain sparks.	Hot Work Operator	☐

Step	Task	Owner	Done
5.6	**Assign the fire watch** Assign a trained fire watch to the task who has no other duties during the work, and confirm they know how to use the extinguisher and how to raise the alarm.	Site Supervisor	☐
5.7	**Don PPE and start the work** Put on the PPE specified for the task, such as a welding helmet, flame-resistant clothing and gloves, and begin the hot work within the conditions stated on the permit.	Hot Work Operator	☐
5.8	**Monitor continuously during the work** The fire watch observes the work area and surrounding spaces continuously for sparks, smoke or smoldering material for the entire duration of the hot work. **Checkpoint:** The fire watch remains at the task with no other duties for the entire duration of the hot work.	Fire Watch	☐
5.9	**Stop work if a hazard develops** Stop the hot work immediately if a fire hazard develops, such as combustible material catching or an unexpected gas source, and notify the site supervisor.	Hot Work Operator	☐
5.10	**Continue fire watch after work stops** After the hot work finishes, the fire watch continues monitoring the area for the period stated on the permit to catch any smoldering material before it becomes a fire. **Warning:** A fire can smolder unseen and ignite well after hot work has stopped, so do not leave the area early.	Fire Watch	☐
5.11	**Close out the permit** Once the fire watch period is complete and the area is confirmed clear, sign the permit as closed and return it to the permit issuer.	Hot Work Operator	☐
5.12	**File the permit record** File the completed and signed permit in the hot work permit register, noting any issue encountered during the task.	Site Supervisor	☐

6. Quality checks

- Every hot work task has a signed permit on file before work started.
- A fire watch with no other duties is assigned for every permit issued.
- The fire watch period after work matches the time stated on the permit.
- Permits are closed out and filed the same day the work is completed.

7. Records

- Signed hot work permits
- Hot work permit register
- Fire watch assignment log

8. KPIs

- Percentage of hot work tasks with a permit on file before work started
- Number of hot work related fire incidents or near misses
- Average fire watch duration recorded after work completion

9. Common mistakes

- Starting welding or cutting before the permit is signed.
- Assigning a fire watch who also has other tasks to do at the same time.
- Leaving the area as soon as the hot work stops instead of maintaining the fire watch.
- Not clearing combustible material far enough from the work area.

10. Revision history

Revision	Date	Description	Reviewed by
1.0	September 15, 2026	Initial release	Ilia Pirozhenko

Approval

Prepared by	Approved by	Date

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