OpsAuditHub opsauditihub.com	DOC ID: **SAF-0130**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.252 and NFPA 51B**	AUDIT FREQUENCY: **Per Shift / Prior to Each Hot Work Operation**

Welding Hot Work Permit Sop Template

Operational Scope: Defines mandatory safety protocols and pre-work authorizations for all welding, cutting, and open-flame operations within manufacturing and industrial facilities. Establishes hazard mitigation criteria to prevent workplace fires, explosions, and combustible material ignitions in compliance with NFPA 51B.

MANDATORY PPE:	Auto-Darkening Welding Helmet (ANSI Z87.1), Flame-Resistant Leather Welding Jacket & Sleeves, Goatskin/Cowhide TIG/MIG Welding Gloves, Metatarsal Safety Boots with Steel Toe (ASTM F2413), Safety Glasses with Side Shields (ANSI Z87.1), Respirator with P100/OV Cartridge (NIOSH Approved)
PREREQUISITES:	Verify certified Fire Watch is assigned, trained, and equipped with a charged 20-lb ABC dry chemical extinguisher. | Inspect all welding cables, torches, and gas manifolds for leaks, fraying, or mechanical defects before energizing. | Complete atmospheric testing if hot work occurs in a designated confined space or near volatile process piping.

PRE-WORK AREA PREPARATION & HAZARD ELIMINATION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Combustible Material Clearance**	All combustible materials, liquids, and dust swept or removed within a minimum 35-foot (11-meter) radius of the hot work zone.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
2	**Floor Openings & Wall Penetrations**	All cracks, gaps, floor openings, and wall penetrations sealed or covered with fire-retardant blankets to prevent spark migration.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
3	**Fire Suppression Systems Active**	Local sprinklers, fire alarms, and deluge systems verified fully operational; heads covered with wet rags if necessary, to be removed immediately post-work.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A

EQUIPMENT SAFETY & VENTILATION COMPLIANCE

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
4	**Welding Machine Grounding**	Welding unit securely grounded to the workpiece, not to building structural steel, piping, or unrelated machinery.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
5	**Compressed Gas Cylinders Security**	Oxygen and acetylene/argon cylinders upright, secured with heavy-duty chains to a cart or wall, and stored with valve protection caps when not in active use.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
6	**Flashback Arrestors & Hoses**	Flashback arrestors installed at both torch and regulator ends of fuel gas and oxygen lines; hoses free of cuts, kinks, or tape repairs.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
7	**Local Exhaust Ventilation (LEV)**	Portable fume extraction units positioned within 12 inches of the weld arc to capture hazardous hexavalent chromium, zinc, or cadmium fumes.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

POST-WORK MONITORING & PERMIT CLOSURE

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
8	**Mandatory Fire Watch Duration**	Designated Fire Watch remains on site for a minimum of 60 minutes following the cessation of all hot work activities to monitor for smoldering embers.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
9	**Final Thermal Inspection**	Infrared thermometer or physical touch check confirms ambient temperature stabilization and absence of hidden hot spots in adjacent wall cavities.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
10	**Permit Sign-Off & Archiving**	Hot work permit physically signed out by operator, fire watch, and safety supervisor, then filed for permanent safety record retention.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A

Certified Hot Work Operator / Fire Watch Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
Site Safety Supervisor / Operations Manager Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

COMPLIANCE NOTICE: This document must be archived for a minimum of 12 months in accordance with workplace safety recordkeeping guidelines.

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