

Welding Safety & Ventilation

Guy's Construction
123 Main Street, Anytown, CA 90210

Ontology-Backed Safety Document

Effective Date: June 08, 2026

SAMPLE DOCUMENT - NOT FOR COMPLIANCE USE

JURISDICTION AND REGULATORY FRAMEWORK

STATE-SPECIFIC: California has the following requirements:

- lead exposure above the action level
- cadmium fumes from surfaces painted with cadmium-containing paints
- surfaces painted with cadmium-containing paints
- cadmium fumes and airborne particulates
- cadmium fumes and airborne cadmium
- general corrosion has reduced the wall thickness of any metal component to less than that required for the well's maximum operating pressure
- an automatic system for the detection of fire and initiation of the operation of a sprinkler system
- Category 1
- in such a manner as to preclude unreasonable disruption of the operations of the place of employment being inspected
- the maximum phase-to-phase voltage of the circuit in which they are installed, and for the full-load current of the circuit that is supplied power through the device
- Subpart J - Welding and Cutting

1926.350

- Subpart J (Welding and Cutting) - Gas welding and cutting
- Subpart J requirements including 1926.350 through 1926.354
- repealed in Oregon; replaced by state rule 437-002-2253
- in accordance with paragraph (n)(9) of this section
- Initial estimate of amount of product released
- all other factors the operator deems appropriate
- uncertainties in any reported results (including tool tolerance) as part of that analysis
- for all buildings at points where they will be readily accessible for shutting off the gas supply to these buildings in any emergency
- any Class I waste plume existing at the time of permitting
- standing away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials
- being struck by falling objects
- compatible and integrated with the disaster, fire and/or emergency response plans of local, state, and federal agencies
- the Commissioner of Conservation for a public hearing for the purpose of establishing rules and regulations and the creation of drilling units for each such pool
- used for falling object protection and work directly below the opening barricaded by the CBB system
- a diagrammatic sketch of the mechanical installation along with a detailed explanation of the flow, procedures and frequency of well tests, calibration/proving of metering devices and allocation formulas
- 8 hours of refresher training annually
- overhead protection not more than 9 feet above the platform shall be installed
- being struck by falling objects

- a list of interested parties (those with interests in the leases and/or units from which production is to be commingled for which the applicant has no existing commingling authority)
- Mild, Moderate, or Severe
- inadequate respiratory protection or medical monitoring
- undetected occupational disease progression
- lead dust, fume or mist
- appropriate fume hood and according to SDS instructions
- explanation of how to respond when equipment malfunctions or deviations from proper procedures are detected
- explanation of how an employee will be expected to use the technology
- explanation of how to detect malfunctioning equipment or deviations from proper procedures
- not larger than two inches in diameter and not more than 1/2 inch thick, operating at peripheral speeds less than 1800 SFPM when mounted on mandrels driven by portable drills
- the individual in charge of the ICS of any actions needed to be taken to correct these hazards at the emergency scene

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FEDERAL OSHA REQUIREMENTS

- Employee instruction in safe means of arc welding and cutting

1926.351(d)

- employee instruction in safe means of arc welding and cutting

29 CFR 1926.351(d)

- welding helmet ANSI Z87.1 with shade lens (SMAW 10-14, GMAW 10-13, GTAW 8-14, oxy-fuel cutting 3-6), FR clothing ASTM F1506, leather gauntlet gloves, leather boots ASTM F2413 with metatarsal guard (Mt), hearing protection if grinding/gouging

29 CFR 1910.252(b), ANSI Z87.1, ASTM F1506, ASTM F2413, OSHA Fact Sheet

- written permit authorizing welding/cutting/brazing, issued by employer's designated authority, area inspected for fire hazards, fire watch assigned

29 CFR 1910.252(a)(2)(i), 1926.352(e)

- written hot work permit for welding, cutting, brazing within 35 feet of combustibles; fire watch for 30 minutes after completion

29 CFR 1926.352

- Subpart J - Welding and Cutting

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- Subpart J requirements including 1926.350 through 1926.354
- chromium VI (5 ug/m³), cadmium (5 ug/m³), zinc oxide (5 mg/m³ respirable), manganese (5 mg/m³ ceiling); welding on coated or treated metals requires specific ventilation

29 CFR 1910.1026 (CrVI), 1910.1027 (Cd), 1910.1000 Table Z-1

- 5 mg/m³ ceiling (OSHA PEL). ACGIH TLV: 0.02 mg/m³ (8-hr TWA) for respirable fraction. Neurological effects (manganism) at chronic exposure.

29 CFR 1910.1000 Table Z-1

- an air purifying respirator, commonly referred to as a dust or a fume respirator, which removes most of the dust or fume from the air passing through the device
- Subpart D (fume limits)

29 CFR 1926.353(a)(2)

- mechanical ventilation, local exhaust at point of welding, or airline respirator. Natural ventilation insufficient in confined spaces.

29 CFR 1910.252(c), 1926.353

- either general mechanical ventilation systems or local exhaust systems

29 CFR 1926.353(a)(1)

COMPANY PROCEDURES

Guy's Construction implements the following procedures for welding safety & ventilation:

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29 CFR 1910.252(a)(2)(i), 1926.352(e)

- Guy's Construction shall: written hot work permit for welding, cutting, brazing within 35 feet of combustibles; fire watch for 30 minutes after completion

29 CFR 1926.352

TRAINING REQUIREMENTS

- All employees involved in this scope of work must receive initial training before beginning work
- Refresher training when procedures change or deficiencies are observed
- Training must be documented with date, topic, trainer, and attendees

RECORDKEEPING

- Training records: duration of employment
- Inspection/monitoring records: project duration + 3 years
- Incident reports: 5 years

California STATE-SPECIFIC REQUIREMENTS (FULL)

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