

WAC 296-24-69503 Special precautions. When the nature of the work to be performed falls within the scope of WAC 296-24-69501(2) certain additional precautions may be necessary:

(1) **Combustible material.** Wherever there are floor openings or cracks in the flooring that cannot be closed, you must take precautions so that no readily combustible materials on the floor below will be exposed to sparks which might drop through the floor. You must observe the same precautions with regard to cracks or holes in walls, open doorways and open or broken windows.

(2) **Fire extinguishers.** You must maintain suitable fire extinguishing equipment in a state of readiness for instant use. Such equipment may consist of pails of water, buckets of sand, hose or portable extinguishers depending upon the nature and quantity of the combustible material exposed.

(3) **Fire watch.**

(a) Fire watchers must be required whenever welding or cutting is performed in locations where other than a minor fire might develop, or any of the following conditions exist:

(i) Appreciable combustible material, in building construction or contents, closer than 35 feet to the point of operation.

(ii) Appreciable combustibles are more than 35 feet away but are easily ignited by sparks.

(iii) Wall or floor openings within a 35-foot radius expose combustible material in adjacent areas including concealed spaces in walls or floors.

(iv) Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.

(b) Fire watchers must have fire extinguishing equipment readily available and be trained in its use. They must be familiar with facilities for sounding an alarm in the event of a fire. They must watch for fires in all exposed areas, try to extinguish them only when obviously within the capacity of the equipment available, or otherwise sound the alarm. A fire watch must be maintained for at least 1/2 hour after completion of welding or cutting operations to detect and extinguish possible smoldering fires.

(4) **Authorization.** Before cutting or welding is permitted, the area must be inspected by the individual responsible for authorizing cutting and welding operations. The responsible individual must designate precautions to be followed in granting authorization to proceed, preferably in the form of a written permit.

(5) **Floors.** Where combustible materials such as paper clippings, wood shavings, or textile fibers are on the floor, you must sweep the floor clean for a radius of 35 feet. You must keep combustible floors wet, covered with damp sand, or protected by fire-resistant shields. Where floors have been wet down, you must protect personnel operating arc welding or cutting equipment from possible shock.

(6) **Prohibited areas.** You must not permit cutting or welding in the following situations:

(a) In areas not authorized by management.

(b) In sprinklered buildings while such protection is impaired.

(c) In the presence of explosive atmospheres (mixtures of flammable gases, vapors, liquids, or dusts with air), or explosive atmospheres that may develop inside uncleaned or improperly prepared tanks or equipment which have previously contained such materials, or that may develop in areas with an accumulation of combustible dusts.

(d) In areas near the storage of large quantities of exposed, readily ignitable materials such as bulk sulphur, baled paper, or cotton.

(7) **Relocation of combustibles.** Where practicable, you must relocate all combustibles at least 35 feet from the work site. Where relocation is impracticable, you must protect combustibles with flameproofed covers or otherwise shielded with metal or curtains. Edges of covers at the floor should be tight to prevent sparks from going under them. This precaution is also important at overlaps where several covers are used to protect a large pile.

(8) **Ducts.** You must suitably protect or shut down ducts and conveyor systems that might carry sparks to distant combustibles.

(9) **Combustible walls.** Where cutting or welding is done near walls, partitions, ceiling or roof of combustible construction, you must provide fire-resistant shields or guards to prevent ignition.

(10) **Noncombustible walls.** If welding is to be done on a metal wall, partition, ceiling or roof, you must take precautions to prevent ignition of combustibles on the other side, due to conduction or radiation, preferably by relocating combustibles. Where combustibles are not relocated, you must provide a fire watch on the opposite side from the work.

(11) **Combustible cover.** You must not attempt welding on a metal partition, wall, ceiling or roof having a combustible covering nor on walls or partitions of combustible sandwich-type panel construction.

(12) **Pipes.** You must not undertake cutting or welding on pipes or other metal in contact with combustible walls, partitions, ceilings or roofs if the work is close enough to cause ignition by conduction.

(13) **Management.** Management must recognize its responsibility for the safe usage of cutting and welding equipment on its property and:

(a) Based on fire potentials of plant facilities, establish areas for cutting and welding, and establish procedures for cutting and welding, in other areas.

(b) Designate an individual responsible for authorizing cutting and welding operations in areas not specifically designed for such processes.

(c) Insist that cutters or welders and their supervisors are suitably trained in the safe operation of their equipment and the safe use of the process.

(d) Advise all contractors about flammable materials or hazardous conditions of which they may not be aware.

(14) **Supervisor.** The supervisor:

(a) Must be responsible for the safe handling of the cutting or welding equipment and the safe use of the cutting or welding process.

(b) Must determine the combustible materials and hazardous areas present or likely to be present in the work location.

(c) Must protect combustibles from ignition by the following:

(i) Have the work moved to a location free from dangerous combustibles.

(ii) If the work cannot be moved, have the combustibles moved to a safe distance from the work or have the combustibles properly shielded against ignition.

(iii) See that cutting and welding are so scheduled that plant operations that might expose combustibles to ignition are not started during cutting or welding.

(d) Must secure authorization for the cutting or welding operations from the designated management representative.

(i) Must determine that the cutter or welder secures their approval that conditions are safe before going ahead.

(ii) Must determine that fire protection and extinguishing equipment are properly located at the site.

(iii) Must ensure fire watches are available at the site when required.

(15) **Fire prevention precautions.** You must permit cutting or welding only in areas that are or have been made fire safe. Within the confines of an operating plant or building, cutting and welding should preferably be done in a specific area designed for such work, such as a maintenance shop or a detached outside location. Such areas should be of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably segregated from adjacent areas. When work cannot be moved practically, as in most construction work, you must make the area safe by removing combustibles or protecting combustibles from ignition sources.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 18-03-159, § 296-24-69503, filed 1/23/18, effective 2/23/18; WSR 15-24-100, § 296-24-69503, filed 12/1/15, effective 1/5/16. Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-24-69503, filed 7/20/94, effective 9/20/94; Order 73-5, § 296-24-69503, filed 5/9/73 and Order 73-4, § 296-24-69503, filed 5/7/73.]