

REDDING FIRE DEPARTMENT

Hot Work (Welding & Cutting)

Permit _____

Please call Redding Fire Department, Bureau of Fire Prevention, (530)225-4141, to assist in processing this application.

Name of Applicant:	Date:
Address:	Telephone:
Location of hot work:	
Area of cutting or welding:	
Last known product in area of welding, i.e. flammable liquid:	
Special precautions:	

I have read and provided the necessary information required for processing this application.	
Hot work Supervisor / Signature & License #: _____	Phone #: _____
Responsible Person: _____	Phone#: _____

FIRE DEPARTMENT USE ONLY			
Approved ()	Denied ()	Permit Issued by:	
Date Issued:		Permit #:	
Fees Paid?	Yes ()	No ()	Amount:
Additional Comments:			

REDDING FIRE DEPARTMENT

Hot Work Application for Permit

Location of Hot Work: _____

Responsible Person: _____ Phone: _____

Date

Initial

Section I - Requirements & Limitations

Issuance of permit subject to compliance with the listed requirements and approval by field inspection and necessary test. The listed requirements are specified in the California Fire Code Chapter 26, NFPA Standard #312, #327, and #51B. Your permit is to be on the premise at all times.

Permit

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Before cutting or welding is permitted, the area shall be inspected by the individual (supervisor) responsible for authorizing cutting and welding operations to ensure it is a fire safe area. |
| _____ | _____ | 2. The supervisor shall be responsible for the safe handling of cutting and welding equipment and for the safe use of the cutting and welding process. |
| _____ | _____ | 3. The supervisor shall determine the combustible material and hazardous areas present or likely to be present in a work location. |
| _____ | _____ | 4. Supervisors shall protect combustibles from ignition by the following: |
| _____ | _____ | a. Have the work moved to a location free from dangerous combustibles. |
| _____ | _____ | b. If the work cannot be moved, have the combustibles moved to a safe distance from the work or have the combustible properly shielded. |
| _____ | _____ | c. See that cutting and welding are scheduled so that operations that might expose combustibles to ignition are not started during cutting or welding. |
| _____ | _____ | 5. The supervisor shall determine that fire protection and extinguishing equipment are properly located at the site. |

- _____
- _____
6. A final check-up shall be made by the supervisor one-half hour after the completion of cutting or welding operation to detect and extinguish possible smoldering fires.

Limitations

- _____
- _____
1. Cutting or welding shall not be permitted in the following situation:

- _____
- _____
- _____
- _____
- a. In areas not authorized by the Fire Department and supervisor.
- b. In sprinklered buildings while such protection is impaired.
- c. In the presence of an explosive atmosphere (mixtures of flammable gas, gases, vapors, liquids, or dust with air) or an explosive atmosphere that may develop inside unclean or improperly prepared drums, tanks, or other containers and equipment that have previously contained such materials or that may develop in areas with an accumulation of combustible dust.

Exception: Those areas which are inerted as described in Section II may be allowed to have welding or cutting operations conducted.

- _____
- _____
- _____
- _____
- _____
- d. In areas near the storage of large quantities of exposed, readily ignitable material such as bulk sulfur, baled paper, or cotton.
2. Cutting and welding equipment to be used shall be in satisfactory operating condition and in good repair.
3. Where combustible material such as paper clippings, wood shavings, or textile fibers are on the floor, the floor shall be swept clean for a radius of 35 feet. Combustible floors (except wood or concrete) shall be kept wet, covered with damp sand or protected by a fire resistant shield.
4. Openings or cracks in walls, floors, or ducts within 35 feet of the site shall be tightly covered to prevent the passage of sparks to adjacent areas.
5. Conveyer systems that might carry sparks to distance combustibles shall be suitably protected.

protection equipment may be necessary depending on the location of welding and the severity of the hazard.

2. When welding or cutting is done in close proximity to a sprinkler head, a wet rag shall be laid over the head and then removed at the conclusion of welding. Special precautions shall be taken to avoid accidental operation of automatic fire detection or suppression systems.

3. A fire watch shall be maintained for at least one-half hour after completing cutting or welding operations to detect and extinguish any possible smoldering fires.

- a. Fire watchers shall have fire extinguisher equipment readily available and be trained in its use.

- b. Fire watchers will be familiar with the facility and procedures for sounding the alarm in the event of a fire.

- c. Fire watchers shall watch for fires in all exposed areas and try to extinguish them first only when obviously within the capacity of the equipment available or otherwise sound the alarm immediately.

4. When hot work processes cannot be properly safeguarded in making the necessary repair, such repairs shall be accomplished by safer means such as drilling, sawing, bolting, other appropriate means.

5. No welding, burning, or other open flame or spark producing machine or operations such as chipping, grinding, etc., shall be permitted in close proximity to the application of flammable paints or flammable compounds. Adequate ventilation shall be provided to maintain an atmosphere at not more than 10% of the lower explosive limit or below the lower limit of toxicity for the particular material as determined by a certified person.

Date

Initial

Section II - Welding on Small Tanks & Containers

1. Work on tanks or containers that have held liquids or gases shall be performed under the supervision of persons who understand the fire and explosion potential involved. Workers shall be sufficiently skilled to safely carry out the operation necessary.

2. To ensure safe conditions within the tank or container, tests shall be made for flammable vapors generally with the appropriate combustible gas indicator and shall also be

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conducted frequently during the course of the work. All work shall be stopped immediately when the presence of flammable vapors are indicated by the test.

3. Tanks and containers may need to be cleaned to reduce the accumulation of flammable vapors. Prior to cleaning, the tank or container shall be vented adequately to protect personnel from harmful exposure of toxic vapors or gases. Empty and drain the tank or container and flush with proper cleaning liquid. Disconnect, plug, or blank off all piping or other connections to the tank or container being cleaned. Safely dispose of all liquid or solid residue material.

4. If the flammable liquid is water soluble, it can be removed by completely filling the container with water and draining repeatedly several times. Extreme care should be taken to eliminate all vapors.

5. Gas freeing may be accomplished by purging with air and a safe atmosphere may be sustained by continuing the ventilation. When openings of sufficient size are available, air movers that do not provide an ignition source may be attached so that air is drawn through one opening and discharged through another. An effective bond shall be maintained between the air mover and the tank or container being cleaned.

6. Inerting of vapor space by means of reducing the oxygen content to the point where combustion cannot take place, can be obtained by placing sufficient quantities of dry ice or CO₂ in the container (1.5 pounds per 100 gallons). Close all openings in the tank or containers with the exception of the filling connections and vent. Introduce the inert gas into the tank. Portable carbon dioxide extinguisher shall not be used for the purpose of inerting a tank because of the generation of static electricity. Evenly distribute dry ice over the bottom of the container to create rapid evaporation. Ensure the vented flammable vapors are being released to the outside atmosphere and not being collected in a dangerous area.

7. Steam cleaning may be introduced into the tank or container through a pipe inserted through the opening and shall be bonded to the container.

8. Chemical cleaning may be permitted with a chemical solution. The use of goggles and gloves and other necessary preventive clothing should be considered with this operation.

9. Testing for flammability is the most important phase of the cleaning procedure and determines whether or not cleaning

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has been effective. Readings from a combustible gas indicator giving percentage of the lower flammable limits of the vapors present in the atmosphere should be conducted.

- _____ _____ 10. Notify the Redding Fire Department prior to welding operations.

24-HOUR NOTICE FOR INSPECTION IS REQUIRED.

A final inspection and approval thereof is necessary before a permit will be issued. The Fire Prevention Bureau must be notified 24 hours ahead of time for any tests or inspections, by calling (530) 225-4141.

04/2008