

UC Santa Barbara  
Policies

Policy 5465

Issuing Unit: Administrative Services

Date: April 6, 1992

## WELDING, CUTTING, AND HOT WORK OPERATIONS

### I. REFERENCES:

California Code of Regulations, Title 19, Article 1, Section 1.09 (b), Standard Prevention Practices, adopts the Uniform Fire Code 1991 Edition.

### II. POLICY:

#### A. Welding, Cutting or Hot Work Permit:

1. A permit (Attachment A) must be obtained from one of the following individuals prior to starting any welding, cutting or hot work operations:
  - a. For Residence Halls or the University Center, contact Maintenance Supervisor, extension 3312.
  - b. For Apartment Living and Family Student Housing, contact Maintenance Supervisor, extension 3082.
  - c. For all other buildings, contact Central Control, Facilities Management, extension 4096.
2. The individual taking out the permit must personally examine the location where the work is to be done and insure that all safety precautions have been taken. These specific fire safety requirements are outlined on the back of the Hot Work Permit. The permit will be issued to one person responsible for work to be accomplished. Permits will be issued to welding shops on an annual basis. Renewal requests will be made on a case by case basis. Contractor permits may be issued for the duration of a contract or specific job from the applicable individual, as stated above. Periodic inspections may be made. This requirement applies to all contract work, no matter what department the work is performed in. The Hot Work Permit must be displayed at the job site, preferably attached to or near the welding or cutting equipment. Permits issued to shops will be displayed in a prominent place at the approved work area.

#### B. General Safety Rules for Welding, Cutting and Hot Work

1. No device or attachment facilitating or permitting mixture of air or oxygen without combustible gases prior to consumption, except at the burner or in a standard torch or blowpipe, shall be allowed unless approved for the purpose.
2. The user shall not transfer gases from one cylinder to another to mix gases in a cylinder.

3. Under no conditions shall acetylene gas be generated, piped (except in approved cylinder manifolds), or utilized at pressure, except when dissolved in a suitable solvent in cylinders manufactured according to Interstate Commerce Commission requirements.
4. The use of liquid acetylene is prohibited.
5. Acetylene gas shall not be brought in contact with unalloyed copper except in blowpipe or torch.
6. Oxygen shall never be used from cylinders through torches or other devices equipped with shutoff valves, without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.
7. Fuel gas shall never be used from cylinders through torches or other devices equipped with shutoff valves, without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.
8. Cylinders, valve regulators, hose and other apparatus and fittings containing or using oxygen shall be kept free from oil and grease. Oxygen cylinders and apparatus and fittings shall not be handled with oily hands, gloves or greasy materials.
9. When moving compressed gas cylinders by crane, suitable cradles shall be used in order to reduce the possibility of dropping. Ordinary rope slings or electro-magnets shall not be used.
10. Oxygen and fuel gas cylinders and acetylene generators shall be placed far enough away from the welding position that they will not be unduly heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame.
11. No gas welding or cutting shall be done in or near rooms or locations where flammable liquids or vapors, lint, dust or loose combustible stocks are so located or arranged that sparks or hot metal from the welding or cutting operations may cause ignition or explosion of such materials.
12. When such welding or cutting must be done above or within ten feet of combustible construction or material, or above a place where workers are employed, or where persons are likely to pass, noncombustible shields shall be interposed to protect such materials and persons from sparks and hot metal or oxide.
13. One or more first aid fire-extinguishing appliances of a suitable type shall be kept at the location where welding or cutting is being done.
14. When welding or cutting is done above or within ten feet of combustible construction or material, a fire watch shall be kept to make use of fire-extinguishing equipment,

if needed.

15. A fire watch shall be maintained for at least a half hour after completion of cutting or welding operations to detect and extinguish possible smoldering fires. This time may be increased in extremely flammable areas or wood frame buildings.

III. ATTACHMENTS:

- A. Hot Work Permit
  - B. Information Sheet for Hot Work Permits
- Contact Environmental Health and Safety.

For questions or comments regarding the format of the above information, please contact [webcontact@ucsbuxa.ucsb.edu](mailto:webcontact@ucsbuxa.ucsb.edu).

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Last Modified By: HMW, 5/21/97

Return to the [UC Santa Barbara Policies Home Page](#)