Chapter 8.10

Licensing For Welding And Cutting

Section 1. Approval. Approved means accepted by the chief of the Fire Department as a result of their investigation and experience or by reason of test, listing or approval by Underwriters' Laboratories, Inc. or other nationally recognized testing agency. Welding or Cutting shall include gas or electric-arc welding or cutting or any combination thereof.

Section 2. Permits.

Subdivision 1. A permit shall be required of each company, corporation, copartnership or owner-operator performing welding or cutting operations except as provided in Subdivision 2, below. This permit shall not be required for each welding or cutting job location. The Company, corporation, co-partnership or owner-operator shall notify the Chief of the Fire Department in advance where such work is taking place, except where such work is done in response to an emergency call that does not allow time for the Chief to be notified in advance of the work.

Subdivision 2. A permit shall not be required of any company, corporation, copartnership or owner-operator:

- A. Where the welding or cutting is performed in areas specifically designed or approved for the purpose, or;
- B. Having an approved permit system established for control of the fire hazards involved.

Subdivision 3. Application. Application for a permit required by this ordinance shall be made by the company, corporation, co-partnership or owner-operator performing the welding or cutting operation or by his duly authorized agent. Such application shall be made to the Chief of the Fire Department in such form and detail as he shall prescribe.

Subdivision 4. Issuance. The Chief of the Fire Department shall not issue a permit for welding or cutting operations unless he is satisfied that the individuals in charge or performing such operations are capable of doing such work in a safe manner. Demonstration of a working knowledge of the provisions of this ordinance shall constitute acceptable evidence of compliance with this requirement.

Subdivision 5. Permits. A permit shall constitute permission to perform welding or cutting operations as indicated thereon and shall not be transferable. Such permit shall not take the place of any license required by law.

Subdivision 6. Renewal. Permits shall be renewed annually.

Subdivision 7. Display of Permit. Permits shall at all times be kept on the premises designated therein, and shall at all reasonable times be subject to inspection by any officer of the fire or police department.

Subdivision 8. Records. Companies, corporations, co-partnerships and owneroperators required to have a permit shall maintain a record of all locations where welding or cutting operations are performed and have it available for inspection by the Chief of the Fire Department.

Subdivision 9. Inspection. The Chief of the Fire Department may revoke a permit or approval issued if any violation of this ordinance is found upon inspection or in case there has been any false statement or misrepresentation made as to a material fact in the application on which the permit or approval was based.

Section 3. In the performance of welding or cutting operations only approved equipment shall be used and the equipment shall be installed and operated in accordance with nationally recognized good practice. The standards of the National board of Fire Underwriters N. 51, Gas System for Welding and Cutting, and American Standard Z49.1, Safety in Welding and Cutting, shall be considered as nationally recognized good practice.

Section 4. Approval.

Subdivision 1. Before welding or cutting operations are begun in areas not designed or approved for the purpose, specific authorization shall be obtained from the owner of the premises or his duly authorized agent.

Subdivision 2. Areas. When welding or cutting operations are performed above, or within 35 feet or combustible construction or material exposed to the operation, or within 35 feet of floor, ceiling or wall opening so exposed:

Shields – Such combustible construction or material shall be protected by noncombustible shields or covers from possible sparks, hot metal or oxide.

Shields – Such floor, ceiling or wall openings shall be protected by noncombustible shields or covers.

Fire Watcher – A fire watcher shall be provided to watch for fires, make use of portable fire extinguishers or fire hose, and perform similar fire prevention and protection duties. The fire watcher shall remain on the job at least thirty minutes after the welding or cutting operations have been completed to insure that no fire exists. A signed inspection report attesting to that fact shall be filed and available for inspection by the Chief of the Fire Department.

Subdivision 3. Extinguishers. One or more portable fire extinguishers of approved type and size shall be kept at the location where welding or cutting is to be done.

Subdivision 4. Explosions. Welding or cutting shall not be done in or near rooms or locations where flammable gases, liquids or vapors, lint, dust, or loose combustible stocks are present when sparks or hot metal from the welding or cutting operations may cause ignition or explosion of such materials.

Subdivision 5. Containers. Except as provided in Subdivision 6 below, welding or cutting shall not be performed on containers and equipment which contain or have contained flammable liquids, gases or solids until these containers and equipment have been thoroughly cleaned or inerted or purged.

Subdivision 6. Hot Tapping. "Hot tapping" may be permitted on tanks and pipe lines provided such operations are performed by companies, corporations, co-partnerships or owner-operators not required to have a permit under Section 2, Subdivision 1.

Subdivision 7. Sprinkler. Sprinkler protection shall not be shut off while welding or cutting work is being performed. When welding or cutting is done close to automatic sprinkler heads, sheet asbestos or damp cloth guards may be used to shield the individual heads but shall be removed when the work is completed.

Section 5.

Subdivision 1. Combustion. Devices or attachments facilitating or permitting mixture of air or oxygen with combustible gases prior to consumption, except at the burner or in a standard torch or blow-pipe, shall not be allowed unless approved for the purpose.

Subdivision 2. Gas Cylinders. The user shall not transfer gases from one cylinder to another or mix gases in a cylinder.

Subdivision 3. Pressure. Acetylene gas shall not be generated, piped (except in approved cylinder manifolds and cylinder manifold connections), or utilized at a pressure in excess of 15 pounds per square inch gauge unless dissolved in a suitable solvent in cylinder manufactured according to Interstate Commerce Commission requirements.

Subdivision 4. Torch. Acetylene gas shall not be brought in contact with unalloyed copper except in a blowpipe or torch.

Subdivision 5. Pressure Regulators. A cylinder or cylinder manifold for oxygen shall be provided with a pressure regulating device intended for use with oxygen, and so marked.

Subdivision 6. Cylinders. Cylinders permitted inside of buildings shall be stored away from highly combustible materials and in locations where they are not subject to excessive rise in temperature, physical damage or tampering by unauthorized persons. Empty cylinders shall have their valves closed in storage and when shipped.

Subdivision 7. Valves. When a cylinder is not in use, the valve shall be closed and the valve protection cap shall be in place, hand tight.

Subdivision 8. Tests. Tests for leaks in any piping system or equipment shall be made with soapy water. Flames shall not be used.

Subdivision 9. Cylinders. Welding or cutting work shall not be supported on compressed gas cylinders or other containers.

Section 6. Cylinders. Fuel gas cylinders shall be placed with valve end up whenever they are in use.

Section 7. Pressure Regulation. Fuel gas shall not be used from cylinders through torches or other devices equipped with shut-off valves without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.

Section 8. Oil and Grease. Cylinders, valves, regulators, hose and other apparatus and fittings containing or using oxygen shall be kept free from oil or grease. Oxygen cylinders, apparatus and fittings shall not be handled with oily hands or gloves or greasy tools or equipment.

Section 9. Cranes. When moving compressed gas cylinders by crane, suitable cradles shall be used to prevent the possibility of dropping them. Ordinary rope slings or electromagnets shall not be used.

Section 10. Heat. Oxygen and fuel gas cylinders and acetylene generators shall be placed far enough away from the welding area to prevent them from being heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame.

Section 11.

Subdivision 1. Grounding. The frame or case of the welding machine except internal combustion engine driven machines shall be grounded. Ground connections shall be mechanically strong and electrically adequate for the required current.

Subdivision 2. Return Circuits. Welding current return circuits from the work to the machine shall have proper electrical contact at all joints and periodic inspection shall be made to ascertain that proper electrical contact is maintained.

Subdivision 3. Discontinued Periods. When electric arc welding or cutting is to be discontinued for any substantial period of time, such as during lunch hour or overnight, all electrodes shall be removed from the holders, the holders shall be carefully located so that accidental contact cannot occur, and the machines shall be disconnected from the power source.

Section 12. Modification of Ordinance. The Chief of the Fire Department shall have power to modify any of the provisions of this ordinance upon application in writing by the person affected, when there are practical difficulties in the way of carrying out the strict letter of the ordinance, provided that the spirit of the ordinance shall be observed, public safety secured, and substantial justice done. The particulars of such modification when granted or allowed and the decision of the Chief of the Fire Department thereon shall be entered upon the records of the department and a signed copy shall be furnished the applicant.

Section 13. Appeal of Disapproval. Whenever the Chief of the Fire Department shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of the ordinance do not apply or that the true intent and meaning of the ordinance have been misconstrued or wrongly interpreted, the applicant may appeal from the decisions of the Chief of the Fire Department to the City Council within 30 days from the date of the decision of the appeal.

Section 14. Penalties. Any person violating any of the provisions of this ordinance or failing to comply therewith, or who shall violate or fail to comply with any order or regulation made thereunder, or who shall act in violation of any detailed statement of specifications or plans submitted and approved thereunder, shall be guilty of a misdemeanor.