S.O.P. 300.3 – SAFETY, HOT WORK

MAINTENANCE & OPERATIONS SECTION

SEPTEMBER 2018

I) PURPOSE: To establish a standard operating procedure (SOP) for subject item.

II) DEFINITION: Hot work, which is defined as "operations including cutting, welding, thermal welding, brazing, soldering, grinding, thermal spraying, thawing pipe, or any similar situation," is a source of ignition that starts many fires each year. In addition, construction, demolition, and alteration operations often result in the accumulation of combustible debris which compounds the risk of fire.

III) PROCEDURES:

A) A permit is required when contractors or Engineering Service employees are conducting hot work operations on any construction, alteration, or demolition project. Permits must not be issued for cutting, welding, or other hot work in areas not authorized by the Safety Manager or his designated representative, or in sprinklered buildings while such protection is impaired.

B) Authorization to proceed will be given in the form of a work order, after the area is inspected by the individual responsible for supervision of the hot work operations. In addition, a permit to perform hot work will not be issued until:

1) It has been determined that hot work can be safely conducted at the location.

2) Combustible materials have been moved away or covered.

3) The atmosphere is nonflammable; and

4) A fire watch (with portable fire extinguisher) is posted for the duration of the work, and for 30 minutes thereafter, to see that sparks or drops of hot metal have not started a fire.

C) Use only approved apparatus in satisfactory operating condition and in good repair.

D) Cutters or welders and their supervisors must be suitably trained in the safe operation of their equipment, the safe use of the process, and emergency procedures in the event of fire (see attachment #1).

E) The contractor will provide fire blankets, or suitable materials, to isolate activities where sparks can fall into vertical openings or compromise fire protection in occupied spaces above or below the worksite.

F) Advise all contractors or E&OMS personnel about flammable materials or hazardous conditions of which they may not be aware.

G) The supervisor, who may be a contractor, one of his foremen, or an E&OMS employee, must be responsible for the following:

1) Obtaining authorization for cutting/welding from the Safety Section and assuring that the cutter or welder secures approval that conditions are safe, before going ahead.

2) Combustible materials are located at least 35 feet from the worksite, or protected with flame proof covers or shielded with metal or fire-resistant guards or curtains;

3) Openings or cracks in walls, floors, or ducts within 35 feet of the site are covered to prevent the passage of sparks to adjacent areas;

4) Where cutting or welding is done near walls, partitions, ceiling, or roof of combustible construction fire resistant guards or shields are provided to prevent ignition;

5) cutting or welding on pipes or other metal in contact with combustible walls, ceilings or roofs is not undertaken if the work is close enough to cause ignition by conduction;

6) Fully charged and operable fire extinguishers, appropriate for the type of possible fire, are available at the work area;

7) When cutting or welding is executed in close proximity of a sprinkler head, a wet rag is laid over the head during operation.

8) Assuring that nearby personnel are protected against heat, sparks, etc.

9) Assuring that fire watchers are available at the site when required; make a final checkup one half hour after completion of operations if fire watchers are not required.

10) Prior to issuance of hot permit, requesting official will contact electronic mechanic supervisor responsible for survey of the work area fire protection.

11) Any signaling device which might indicate a false alarm signal will be tagged and by-passed.

12) Upon completion of hot work, fire protection will be immediately restored and tested, after which tags will be removed from operation for more than one shift.

13) The Safety Manager or designee will determine the need for alternate protection. This will be accomplished prior to the end of the work shift.

H) The cutter or welder must handle the equipment safely as follows:

1) Have approval by the supervisor before starting to cut or weld.

2) Cut or weld only when conditions are safe.

3) Fire watchers should be provided whenever cutting or welding, or other hot work is performed in Medical Centers and should:

4) Have fire extinguishing equipment readily available and be trained in its use.

5) Be familiar with facilities and procedures for sounding an alarm in the event of fire.

6) Watch for fires in all exposed areas and try to extinguish them first only when obviously within the capability of the equipment available, or otherwise sound the alarm immediately.

7) Maintain the watch for at least a half hour after completion of cutting or welding operations to detect and extinguish smoldering fires.

I) There are instances where very minor repairs and alterations, which are not part of a construction or alteration project, require some hot work. Examples include: soldering electronic equipment or brazing small pipes in a restroom. In these situations, where there are no other alterations to the room and there is no accumulation of combustible debris, openings in corridor, fire-rated walls or shafts, a permit is not considered essential. However, it is still necessary for a foreman or other responsible individual to verify that conditions are safe for hot work. Common sense must be used when determining when a permit

system must be used. Only minor repairs may be conducted without a permit. Cutting and welding, which are very hazardous operations, require permits at all times.

1) No hot work will be authorized on chemical laboratory hoods.
2) Fire watch, fire blankets and fire extinguishers (not less than two) will be provided for all hot work locations.
3) Sensitive projects require an Inner Life Safety Measure from the Safety Office.
4) Gas Welding and Cutting
5) Transporting and Storing Compressed Gas Cylinders
6) Valve protection caps must be in place and secure when cylinders are not in use
7) When pressure cylinders are hoisted, they must be secured in a cradle, sling board or pallet. The use of magnets and/or choker slings is prohibited.
8) Cylinders must be moved in a cart or by tilting and rolling them on their bottom edges.
9) When cylinders are transported by powered vehicles, they shall be secured in a vertical position.
10) Valve protection caps shall not be used for lifting cylinders from one position to another. Bars cannot be used under valves or valve protection caps to pry cylinders loose when frozen.
11) Warm, not hot water shall be used to thaw cylinders loose.
12) Unless cylinders are firmly secured on a special carrier intended for that purpose, the regulators must be removed, and valve protection re-installed before the cylinders are moved.
13) A cylinder truck, chain, or other steadying device must be used to keep the cylinders from being knocked over while in use.
14) When work is completed, when cylinders are empty, or when the cylinders are moved, the valve must be closed.
15) Compressed gas cylinders must always be secured in an upright position, except, if necessary, for short periods of time, while cylinders are being hoisted or carried.
16) Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil and grease) by a minimum of 20 feet, or by a noncombustible barrier at least 5 feet tall that has a fire-resistant rating of at least ½ hour.
17) Cylinders stored inside buildings must be kept in a well-protected, well-ventilated, dry location that is at least 20 feet from highly combustible materials.
18) The in-plant handling, storage and utilization of all compressed gases in cylinders, portable tanks, rail tank cars or motor vehicles must be in accordance with Compressed Gas Association Pamphlet P-1-1965.

J) Placing of Cylinders:

1) Cylinders must be kept far enough away from the actual welding or cutting so that sparks, hot slag or flame will not reach the cylinders.
2) If this is not possible, fire resistant shields must be used.

3) Cylinders must be placed where they cannot become part of an electrical circuit. Electrodes cannot be struck against cylinders at any time.

4) Fuel gas cylinders must be placed with the valve end up whenever they are in use. They should not be placed in a location where they would be subject to open flame, hot metal or other sources of artificial heat.

5) Cylinders containing oxygen or fuel gas must not be taken into confined spaces. Hoses containing oxygen and fuel gases must be removed immediately when not in use.

K) Treatment of Cylinders:

1) Cylinders, regardless of whether they are full or empty, must never be used as rollers or supports.

2) No person other than the supplier can mix gases in a cylinder.

3) Damaged or defective cylinders must never be used.

L) Use of Fuel Gas:

1) The employer must thoroughly instruct employees on the following regulations:

a) Before a regulator is connected to a cylinder, the valve must be "cracked" (opened and immediately closed) so that any foreign material can be cleared prior to the regulator being installed. Foreign bodies or materials entering a regulator can have catastrophic results. The valve should never be cracked in an area where the gas could reach welding work, sparks or other sources of ignition.

b) The cylinder valves should be opened slowly to prevent damage to the regulator. Fuel gas cylinders should never be opened more than 1½ turns, so that the fuel supply can be closed quickly in the event of an emergency.

c) With manifolded or coupled cylinders tied together, at least one wrench shall be immediately available for use.

d) If the cylinder requires a t-wrench or other special tool, that tool should be kept with the cylinder at all times.

e) Nothing is permitted to be placed on top a fuel gas cylinder, so that the cylinder valve can be closed immediately.

f) Fuel gas cannot be used from cylinders that are not equipped with shutoff valves without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.

g) Before a regulator is removed from a cylinder valve, the cylinder must be closed and the gas released from the regulator.

h) If when the valve on a fuel gas cylinder is opened there is found to be a leak around the valve stem, the valve must be closed and the gland nut tightened. If this does not stop the leak, the use of the cylinder shall be disconnected.

i) If a leak develops at the fuse plug or other safety device, the cylinder must be removed from service and removed from the work area.

M) Fuel Gas and Oxygen Manifolds:

1) Fuel gas and oxygen manifolds must have the name of the substance they contain in letters at least 1 inch in height, which shall be either painted on the manifold or in a sign permanently attached to it.

2) Fuel gas and oxygen manifolds must be placed in a safe, well-ventilated and accessible location. They must not be placed in enclosed spaces.

3) Manifold hose connections, including both ends of the supply hose that lead to the manifold, must be designed so that the hose cannot be interchanged between fuel gas and oxygen manifolds. Adaptors shall not be used to permit the interchange of hose. Hose connections must be kept free of grease and oil.

4) When not in use, manifold and header hose connections shall be capped.

5) Nothing can be placed on top of a manifold when in use that will damage the manifold or interfere with the quick closing of the valves.

N) Hose:

1) Fuel gas hose and oxygen hose must be easily distinguishable from each other. They may be contrasting colors, or have different surface characteristics that can be recognized by sense of touch. Oxygen and fuel gas hoses cannot be interchangeable. A single hose with more than one gas passage shall not be used.

2) When parallel sections of oxygen and fuel gas hose are taped together, no more than 4 inches out of 12 can be covered by tape.

3) All hosing in use for the purpose of transferring fuel and oxygen must be inspected at the beginning of each working shift. Defective hosing shall be removed from service.

4) Hosing that has been subject to flashback or that shows severe wear or damage, must be tested at twice the working pressure to which it is subjected, but in no case less than 300 psi. Defective hosing, or hosing in doubtful condition, must not be used.

5) Hose couplings cannot be of the type that can be removed by means of a straight pull without a rotary or twisting motion.

6) Boxes used for the purpose of storage of gas hosing must be ventilated to prevent the accumulation of flammable vapors.

7) Hoses, cables and other equipment must be kept clear of passageways, ladders and stairs.

O) Torches:

1) Clogged torch tip openings must be cleaned with suitable cleaning wire, drills or other devices designed for that purpose.

2) Torches in use must be inspected at the beginning of each shift for leaking shut off valves, hose couplings and tip connections. Defective torches must not be used.

3) Torches must be lighted by friction lighters or other approved devices. The use of matches, lighters or lighting from hot work is not permitted.

4) The head of the torch must not be used to chip or clean slag, remove metal or for any other purpose than that intended.

P) Regulators and Gauges:

1) Oxygen and fuel gas pressure regulators, including their related gauges, shall be kept in proper working order while in use.

2) Oil and Grease Hazards. Oxygen cylinders and fittings shall be kept away from oil and grease. Cylinders, cylinder caps and valves, couplings, regulators, hose and apparatus must be kept free from oil and shall not be allowed to come into contact with oily surfaces or greasy clothes; further, they shall not be used in fuel oil or other storage tanks/vessels.

Q) Arc Welding and Cutting:

1) Manual Electrode Holders. Only manual electrode holders, that are specifically designed for arc welding and cutting and are of a capacity capable of safely handling the maximum rated current required by the electrodes, shall be used. Any current-carrying parts passing though the portion of the electrode holder that the arc welder or cutter grips in his hand and the outer surfaces of the jaws of the holder shall be fully insulated against the maximum voltage encountered to ground.

R) Welding Cables and Connectors:

1) All arc welding and cutting cables shall be completely insulated, the flexible type and capable of handling the maximum current requirements of the work in progress, taking into account the duty cycle under which the arc welder or cutter is working.

2) Only cable that is free from repair or splices for a minimum distance of 10 feet from the cable end to which the electrode holder is connected shall be used. Cables with standard insulated connectors or with splices whose insulating quality is equal to that of the cable are permitted.

3) When it becomes necessary to connect or splice lengths of cable one to another, substantial insulated connectors of a capacity at least equal to the cable must be used. If connections are affected by means of cable lugs, they must be securely fastened together to give good electrical contact and the exposed metal parts of the lugs shall be completely insulated.

4) Cables in need of repair shall not be used. When a cable becomes worn to the extent of exposing bare conductors, the exposed portion must be protected by means of rubber and friction tape or other equivalent insulation.

S) Ground Returns and Machine Grounding:

1) Ground cables must have a safe current-carrying capacity equal to or exceeding the maximum output capacity of the welding or cutting unit to which it is attached. If multiple machines use the same ground, it must have a carrying capacity equal or exceeding the combined capacity of the machines.

2) Pipelines containing gases or flammable liquids and electrical conduits shall not be used as a ground return.

3) When a structure or pipeline is used as a ground return, it must be determined that the required electrical contact exists at all joints. The generation of an arc, sparks or heat at any point shall cause the rejection of the structure as a ground.

4) When a structure or pipeline is continuously employed as a ground return circuit, all joints shall be bonded, and periodic inspections shall be conducted to ensure that no condition of electrolysis or fire hazard exists by virtue of such use.

5) The frames of all arc welding and cutting machines shall be grounded, either through a third wire in the cable containing the circuit conductor or through a separate wire that is grounded at the source of

the current. Grounding circuits, other than by means of the structure, shall be checked to ensure that the circuit between the ground and the grounded power conductor has resistance low enough to permit sufficient current to flow and cause the fuse or circuit breaker to interrupt the current.

6) All ground connections shall be inspected to ensure that they are mechanically strong and electrically adequate for the required current.

T) Operating Instructions

1) Employers must instruct employees on the following:

a) When electrode holders are left unattended, the electrode must be removed, and the holders placed or protected so they cannot make electrical contact with the employees or conducting objects.

b) Hot electrode holders must not be dipped in water. Doing so could expose the welder or cutter to electrical shock.

c) When the welder has to leave the work for a period of time or the machine has to be moved, the power supply to the machine must be not be left open.

d) Shielding. Whenever practical, all arc welding and cutting operations shall be shielded by non-combustible or flameproof screens that will protect the employees and other persons working in the vicinity from the direct rays of the arc.

U) General Fire Prevention:

1) When practical, objects to be welded, cut or heated must be moved to a designated safe location. If they cannot be moved, the area should be cleared of all fire hazards.

2) If the object being cut, welded or heated cannot be removed and the fire hazards cannot be completely removed, positive means shall be taken to confine the heat, sparks and slag to prevent unintentional fires.

3) No welding, cutting, heating or burning shall be conducted where the application of flammable paints or the presence of other flammable compounds or heavy dust concentration creates a hazard.

4) Suitable fire-extinguishing equipment must be immediately available when hot work is in progress.

5) When normal fire prevention measures do not provide the needed protection, a fire watch must be used. This person will directly oversee the hot work operation and will continue to monitor the area of hot work for at least one-half hour after the hot work is complete.

6) When hot work is performed on walls, floors and ceilings, the spread of fire to an adjacent area is possible. It is necessary to provide the same level of fire prevention measures on the opposite side.

7) When working in enclosed spaces, the torches must be turned off immediately after use and not allowed to stay in the confined area for long periods of time. It is highly recommended that the torch and hoses be removed immediately upon the completion of the necessary hot work.

8) The welding, cutting or heating of vessels or containers that have contained toxic or flammable substances shall not be permitted until the container has been filled with water and is thoroughly cleaned and tested, to assure that no flammable/combustible or toxic vapors remain. Failure to do so can result in a catastrophic explosion and/or fire.

9) Before heat is applied to a drum, container or any other hollow structure, a vent must be provided and used to release any built-up pressure.

V) General Ventilation and Protection in Welding and Cutting:

1) Mechanical ventilation shall consist of either general mechanical ventilation (fans located within the room/building) or local exhaust systems (fans at the source of the hazard).

2) General mechanical ventilation must be of sufficient capacity to produce the number of air changes needed to remove fumes and smoke within safe limits.

3) Local exhaust ventilation must consist of freely movable hoods intended to be placed as close as practical to the work by the welder or burner. This system must be of sufficient capacity and arrangement so as to remove fumes and smoke at the source, and keep the concentration of them in the breathing zone within the limits specified by the Occupational Safety and Health Administration (OSHA) standards.

4) Contaminated air discharged from the workplace must not be allowed to re-enter the workplace.

5) All air that is replacing the exhausted air must be clean and respirable.

6) Oxygen must never be used for ventilation purposes, comfort cooling, blowing dust from clothing, or for cleaning a work area.

W) Welding, Cutting and Heating in Confined Spaces:

1) Ventilation (general or local) must be provided whenever welding, cutting or heating is performed in a confined space.

2) When sufficient ventilation cannot be obtained without blocking the entrance of the confined space, employees in the space must be protected by airline respirators, and an employee must be assigned to the outside of the space to maintain communication with those working within the space in the event of an emergency.

3) Lifelines. When a welder must enter a confined space through a manhole or other small opening, means must be provided for quickly removing him/her in case of emergency. When safety belts and lifelines are used for this purpose, they must be attached so the welder's body cannot be jammed in a small exit opening. An attendant with a pre-planned rescue procedure must be stationed outside of the space to observe the welder at all times and be capable of putting the rescue operations into place.

X) Welding, Cutting or Heating of Metals of Toxic Significance:

1) Welding, cutting or heating in an enclosed space involving the following metals must be done only when either general mechanical or local exhaust ventilation is provided:

a) Zinc-bearing base metals, or metals coated with zinc-bearing materials.

b) Lead-based metals.

c) Cadmium-bearing filler materials.

d) Chromium-bearing metals or metals coated with chromium-bearing materials.

2) Welding, cutting or heating in any enclosed space involving these metals must be done with local exhaust ventilation, or employees must be protected with airline respirators:

a) Metals containing lead, other than as an impurity, or metals coated with lead-bearing materials.

b) Cadmium-bearing or cadmium-coated based metals.

c) Metals coated with mercury-bearing materials.

d) Beryllium-containing base or filler materials. Due to its high toxicity, work involving beryllium must be done with both local exhaust ventilation and air line respirators.

3) Employees performing such operations in the open air shall be protected by filter-type respirators in accordance with the respiratory protection standard, except that employees performing such operations on beryllium-containing base or filler materials shall be protected by airline respirators.

4) Other employees exposed to the same atmosphere as the welder must be protected in the same manner as the welder or burner.

Y) Inert Gas Metal-Arc Welding:

1) The inert gas metal-arc welding process involves the production of ultra-violet radiation of intensities of 5 to 30 times that produced during shielded arc metal-arc welding, the decomposition of chlorinated solvents by ultraviolet rays and the liberation of toxic fumes and gases. Therefore, employees shall not be permitted to engage in, or be exposed to, the process until the following special precautions have been taken:

a) The use of chlorinated solvents must be kept at least 200 feet, unless shielded from the exposed arc. Surfaces prepared with the chlorinated solvents shall be thoroughly dry before welding is permitted on such surfaces.

b) Employees in the area not protected from the arc by screening must be protected by the appropriate filter lenses. When two or more welders are exposed to each other's arc, filter lenses must be worn under the welding helmets. Hand shields to protect the welder against the flashes and radiant energy shall be used when either the helmet or the shield is removed.

c) Welders and other employees who are exposed to radiation shall be suitably protected so that the skin is covered completely to prevent burns and other damage by ultraviolet rays. Welding helmets and hand shields shall be free of leaks, openings and of highly reflective surfaces.

d) When inert gas metal-arc welding is being performed on stainless steel, ventilation must be provided to protect the employee from dangerous concentrations of nitrogen dioxide.

Z) General Welding, Cutting and Heating:

1) Welding, cutting and heating, not involving conditions or materials described above, may be normally done without mechanical ventilation or respiratory protective equipment. Due to unusual physical or atmospheric conditions, suitable mechanical ventilation or respiratory protective equipment shall be used.

AA) Welding, Cutting and Heating in Way of Preservative Coatings:

1) Before welding, cutting or heating is started on any surface covered by a preservative coating whose flammability is not known, a test shall be made by a Competent Person to determine its flammability. Preservative coatings shall be considered highly flammable when scrapings burn with extreme rapidity.

2) Precautions must be taken to prevent ignition of highly flammable hardened preservative coatings. When coatings are determined to be highly flammable, they shall be stripped from the area to be heated to prevent ignition.

BB) Protection Against Toxic Preservation Coatings:

1) In enclosed spaces, all surfaces covered with toxic preservatives shall be stripped of all toxic coatings for a distance of at least 4 inches from the area of heat application, or the employees shall be protected by airline respirators.

2) In the open air, employees shall be protected by a respirator.

3) The preservative coatings shall be removed a sufficient distance from the area to be heated to ensure that the temperature of the unstrapped metal will not be appreciably raised. Artificial cooling of the metal surrounding the heating area may be used to limit the size of the area required to be cleaned.

CC) Documentation:

1) Hot work permits will be kept on file in Engineering, Safety Section Offices and on the work site as work is being conducted.

IV) RESPONSIBILITY: N/A

A) DOCUMENTATION: N/A

V) TRAINING: N/A

VI) REFERENCES: N/A

VII) FOLLOW-UP RESPONSIBILITY: Chief of Operation and Maintenance

VIII) REVIEW AND REISSUE DATES:

A) Review Date: Annually

B) Reissue Date: September 2019

IX) SUPERSEDES: N/A

WELDING AND CUTTING INSPECTION CHECKLIST

29 CFR 1926.350 – 1926.354 SUBPART J

Location: _____ **Date:** _____/_____/_____

Job Name: _____ **Contractor:** _____

Inspection Item	*Yes*	*No*	*Comment*	*Correction Date*
Gas Welding & Cutting 1926.350				
1. Valve protection caps are secured during transport?				
2. Gas cylinders are hoisted on a cradle, slingboard, or cage? Magnets are not being used. Cylinders are not being hoisted by the protective cap.				
3. "Rolling" cylinders on the bottom edge is prohibited.				
4. Cylinders are secured in a vertical position when being moved by powered vehicles?				
5. Regulators must be removed and caps in place on cylinders unless they are in a cart designed for such use.				
6. Cylinders must be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are being hoisted or transported.				
7. Oxygen and fuel gas cylinders must be separated by 20' or by a non-combustible barrier at least five feet tall that has at least a one-half hour fire rating.				
8. Cylinders being stored inside of buildings must be kept at least 20' from combustible materials and away from elevators, stairs or gangways.				
9. Cylinders must be kept far enough away from hot work so as not to				

cause a fire hazard.				
10. Oxygen and fuel gas cylinders are prohibited in confined spaces.				
11. Have cylinders been "cracked" to clean out debris prior to the installation of gauges and regulators?				
12. Are "t-handles" or other special wrenches located with the fuel gas to permit easy closure?				
13. Are compressed gas hoses easily distinguishable from each other?				
14. Do hoses have tape exceeding 4" of every 12"? Excess tape can hide damage.				
15. Has the hose been inspected prior to each work shift?				
16. Oxy/fuel hoses must be stored in ventilated boxes (not gang boxes).				
17. Do employees use the proper tools to clean clogged torch tips?				
18. Have torches, hose couplings and connections been inspected prior to the shift?				
19. Are regulators in good working order with operable gauges and covers?				
20. Is oxygen kept away from grease and oil?				

Name: _____ Date: _____/_____/_____

CUTTING AND WELDING PERMIT

THIS PERMIT APPLIES ONLY TO THE AREAS SPECIFIED BELOW:

LOCATION: Room number(s) affected: _____

Floor level(s): _____

DATE: _____ NATURE OF JOB: _____

THE ABOVE LOCATION HAS BEEN EXAMINED. THE PRECAUTIONS CHECKED BELOW HAVE BEEN TAKEN TO PREVENT FIRE. PERMISSION IS GRANTED FOR THIS WORK.

PERMIT EXPIRES: DATE: _____ *TIME:* _____

SIGNED: _____, Project Manager/Safety Officer

TIME STARTED: _____ TIME FINISHED: _____

FINAL CHECK: WORK AREA AND ALL ADJACENT AREAS TO WHICH SPARKS AND HEAT MIGHT HAVE SPREAD WERE INSPECTED FOR AT LEAST 30 MINUTES AFTER THE WORK WAS COMPLETED, AND FOUND FIRE SAFE.

/ / CUTTING AND WELDING EQUPMENT IN GOOD CONDTION.

/ / FLOORS SWEPT CLEAN OF COMBUSTIBLES.

/ / FLAMMABLE LIQUIDS REMOVED FROM WORK AREA.

/ / ALL WALL & FLOOR OPENINGS COVERED.

/ / FIRE WATCH PROVIDED DURING and 30 MINUTES AFTER WELDING & CUTTING WORK IS STOPPED.

/ / FIRE EXTINGUISHING EQUIPMENT ON HAND IN CASE OF FIRE.

/ / PERSONNEL INSTRUCTED IN THE ACTIVATION OF FIRE ALARM.

/ / WALLS AND CEILINGS PROTECTED FROM SPARKS/OPEN FLAMES.

/ / COMBUSTIBLE FLOORS PROTECTED VIA WETTING/COVERING WITH WET SAND.

/ / PROPER UTILITIES SECURED SUCH AS OXYGEN, LP GAS, NATURAL GAS, ETC.

/ / PROPER PERSONAL PROTECTIVE WEAR, I.E., NON FIRE RETARDENT CLOTHING, EYE PROTECTION, ETC.

I have been informed and understand the provisions of this permit. I understand this permit can be revoked at any time if I or my employees fail to follow the provisions outlined above.

Contractor Name (Print): _____

Company (Print): _____

Company Telephone Number: (____) _____

Date: _____