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LAST REVISION: December 16 th , 2019	REVIEWED BY: L. Kirk Berglund, Safety Director	FORM REF No: SP-WELDING
SUBJ: Welding and Cutting		

NOTE: Before any hot work is performed, a Hot Work Permit must be complete. In the majority of cases, our clients will be issuing the permits for the work that is to be performed and their in-house policy will be followed unless it is deemed unsatisfactory. In the event that a client does not have a Hot Work Policy, utilize the Hot Work Permit presented on page three of this document.

Hot Work Permits will be posted at the site where work is to be performed and will remain there until the area is deemed safe (free from burn or fire hazards).

1. TRAINING

1. Only personnel who have been properly trained and deemed competent shall perform hot work. Training shall be performed by qualified personnel from IBEW 369, equipment manufacturers and local certified trainers.

2. PRIOR TO START

1. Prior to starting any hot work, the location where work is to be performed shall be cleared of all combustible materials. Combustible materials that cannot be moved shall be protected by welding screens and blankets.
2. Inspect all equipment to be used during the hot work and if found to be defective, remove it from service and replace with serviceable equipment. No defective hot work equipment shall be used.

3. WELDING AND CUTTING

1. For work more than 4 feet above the floor or ground, use a platform with railings, or with fall-protection equipment. Always clear the area below to help prevent slag from falling on hoses, cables, and people in the area.
2. Be sure adequate ventilation is always provided or wear respiratory protection as needed. Safety harness and attached lifeline should be worn for work in confined spaces (such as tanks and pressure vessels). A similarly equipped helper whose duty is to observe the welder or cutter and effect rescue procedures in an emergency should attend the lifeline.
3. Take special precautions if welding or cutting in a confined space is stopped for some time. Disconnect the power or arc welding or cutting units and remove the electrode from the holder. Turn off the torch valves on gas welding or cutting units, shut off the gas supply at the point outside the confined area, and if possible remove the torch and hose from the area.



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4. After welding or cutting operations are completed, mark any hot metal or post warning signs to keep others away from heated/hot surfaces.
5. Always use equipment in accordance to the manufacturer's instructions and practices.
6. Wear all necessary and required PPE, including though not limited to: Long sleeve, flame resistant shirt such as FR rated shirts.
 1. Safety glasses with side shields
 2. Lead proof welding helmet with the correct filter lens(es)
 3. Protective clothing: flame resistant gauntlet gloves (leather or other suitable material), apron, leggings or high boots and hardhats.
 4. Other clothing should be reasonably free from oil and grease, sleeves and collars should be kept buttoned, and thermal insulated underwear should not be exposed to open flames or sparks.
7. Shield all arc welding and cutting operations with noncombustible or fire resistant screens whenever practical.
8. Suitable fire extinguishing equipment shall be maintained in a state of readiness for instant use. Such equipment may consist of pails of water, buckets of sand, or portable extinguishers depending upon the nature and quantity of the combustible material(s) exposed.
9. Welding or cutting **shall not** be performed under the following situations:
 - In areas not authorized by the Project Supervisor and/or the Customer's management.
 - In splintered buildings while such protection is impaired.
 - In the presence of explosive atmospheres (mixtures of flammable gases, vapors, liquids, or dust 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 accumulation of combustible dusts.
 - In area near the storage of large quantities of exposed, readily ignitable materials, such as bulk sulfur, baled paper, or cotton.
10. Never change electrodes with bare hands or wet gloves, or when standing on wet floors or grounded surfaces.
11. Ground the frames of welding units, portable or stationary, in accordance with the NEC, NFPA 70.
12. Arrange receptacles of power cables for portable welding units so that it is impossible to



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remove the plug without opening the power supply switch, or use plugs and receptacles which have been approved to break full load circuits of the unit.

13. Keep welding cables dry and free of grease and oil to prevent premature breakdown of the insulation.
14. The use of welding curtains may be required to protect personnel in the area from the welding arc flash.

FIRE WATCHES

1. When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed, and for a minimum of thirty minutes after the completion of the work to ensure that no possibility of fire exists. Such personnel shall be instructed as to the specific anticipated fire hazards and how the firefighting equipment provided is to be used.
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Hot Work Permit

YES NO N/A

- Welder, Fire Watch, and Supervisor familiar with Welding and Cutting Policy.
- Welding and cutting equipment in good working condition.
- Workers fitted with appropriate safety equipment.
- Fire Watch properly trained; knows location of appropriate fire fighting equipment.
- Fire Watch knows how to sound fire alarm.
- Fire detection and/or sprinkler system in service.
- Area within 35 feet of work properly swept.
- Combustibles and flammables within 35 feet of work removed or
- Combustibles and flammables protected with appropriate shields.
- Floor and wall openings covered.
- Pipe lines or connections disconnected or blanked.

WORK ON WALLS/CEILINGS

- Areas adjacent to walls being worked on checked for combustibles, and those materials removed.

CONFINED SPACE WORK

- Confined Space Entry Permit required?
- Equipment cleaned of all combustibles.
- Space purged of all flammable vapors and/or gases.

FIRE ALARM SYSTEM IMPAIRMENT

- Are there fire alarm devices in area that could be impacted from welding fumes or smoke? If
yes, Environmental Health and Safety must be notified of any fire alarm system impairments.

APPROVALS AND AUTHORIZATIONS

This permit is valid only so long as work conditions existing at the time of issuance continue. It expires on any change in condition that adversely affects safety in work area.

Issue Date/Time _____ Expiration Date/Time _____

Special

Conditions _____

Signature of Client Representative

Signature of Welder(s)

Signature of Fire Watch