



### 22.1 Policy Statement

All States Materials Group (ASMG) is dedicated to the protection of our employees from occupational injuries and illnesses. ASMG is responsible for providing a safe working environment, and the employees have and must assume the responsibility of working safely.

The objective of this program is to provide specific standards regarding welding, cutting, and other hot work safety and to ensure that each employee is adequately trained and fully aware of safety procedures associated with welding and cutting.

This policy serves as a tool to increase employee protection, and to reduce jobsite hazards. Hot Work presents a significant opportunity for fire and injury. Employees and contractors must apply all precautions of this program prior to commencing any welding or hot work. Reference: OSHA 29 CFR 1910.252 and 1926 Subpart J. and MSHA 30CFR56.4600-4604.

### 22.1 Definitions

- **Authorized Employee:** An employee who is trained and authorized to perform hot work.
- **Fire Watch:** A person who is qualified to monitor hot work for fire or other hazardous conditions, use fire extinguishers and notify an emergency.
- **Hot Work:** Hot work is any task that involves open flames or producing heat and/or sparks or generates enough heat to create an ignition source of building components or contents. Hot work includes, but is not limited to, oxyacetylene torch cutting, grinding metal and welding. The Hot Work Procedure does not apply to cooking and smoking in authorized areas.
- **Hot Work Permit:** The attached permit that identifies the type of hot work, location, procedures, fire precautions, and authorization to perform hot work. The Hot Work Permit is located at the end of this Section.

### 22.3 Responsibilities

- The Supervisor or Manager of each ASMG facility that conducts hot work shall be responsible for enforcing this policy.
- Outside contractors performing work on Company property or job sites are required to follow the regulations and this policy.
- The Safety Manager shall ensure that each ASMG facility that conducts hot work has provided a list of designated hot work areas, that Fire Watch designated employees receive annual fire extinguisher training, and make periodic inspections to ensure compliance with the program.

### 22.4 Hazards

- There are several hazards to consider when performing hot work. These hazards include fires, explosions, electrocution, burns, welder's flash, oxygen depletion, and toxic fumes and gases.



- Each ASMG Supervisor or Manager will be responsible to ensure their personnel are aware of these hazards and have taken adequate steps to prevent such an occurrence.
  - All flammable and combustible materials will be removed 35 feet or more from the Hot Work location. If this is not feasible, other means shall be utilized to shield such materials from ignition.
  - All wall, floor, walkways (below) and openings are covered or protected.
  - Confirm atmosphere in the immediate area is not combustible using an LEL% meter.
  - Hot work on walls and/or ceilings require that combustibles be moved away from the other side of the wall and/or ceiling.
  - Hot work in confined spaces requires that the ASMG Confined Space Program be followed in addition to hot work requirements. Confined spaces must be cleaned of all combustibles, containers purged of flammable liquids and vapors
- The employee shall report any equipment defect or safety hazard to his/her supervisor and the use of the equipment shall be discontinued until the equipment is rendered safe for you by a qualified person.
- **Electrical Arc Welding:** Electrical arc welding presents serious burn, eye, electrical, and fire hazards. Employees performing electrical arc welding shall comply with the following safety requirements to reduce the risk of burns, eye injury, electrical shock, and fire:
  - Always obey all signs posted in the welding area.
  - Use the welding screen to shield other employees from flying slag and intense light.
  - Wear a welding helmet with filter plates and lenses, welding gloves, a long sleeve shirt and long pants when welding.
  - Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.
  - Do not change electrodes with bare hands; use dry welder's gloves.
  - Do not use the welding apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.

### 22.5 Personal Protective Equipment

- It is the responsibility of the Facility Supervisor or Manager to ensure each employee utilizes the appropriate equipment required to safely perform hot work. This includes personal protective equipment listed below:
  - Respirators should be used when welding or torch cutting on stainless steel, and when ventilation is less than adequate.
  - Flame retardant clothing should be worn to prevent clothing from catching on fire.
  - Gloves are required to prevent hand burns.



- All personnel are required to use adequately shielded welding helmets or eye and face protection.
- All eye and face protection must be ANSI approved and the proper shade for the type of operation being performed.

## 22.6 Compressed Gas Cylinders

### ▣ Transporting, Moving, and Storing (also see Section Material Handling Section):

- Valves shall be closed when welding is completed. Valve protection caps shall be in place on gas cylinders that are in storage or not in use.
- When hoisted, they shall be secured on a cradle, sling board or pallet.
- Never hoisted by magnets or choker slings.
- Valve protection caps shall not be used for lifting.
- Shall be moved by tilting and rolling on bottom edges.
- Shall not be allowed to strike each other violently or intentionally dropped or struck.
- Do not handle oxygen cylinders if your gloves are greasy or oily.
- When transported in vehicles, they shall be secured in vertical position.
- Bars shall not be used to pry cylinder caps loose.
- If not firmly secured on special carrier, regulators shall be removed and caps secured.
- Shall be secured upright at all times.
- Inside buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet from highly combustible materials, and away from exit routes.
- Do not store compressed gas cylinders in areas where they can come in contact with chemicals labeled "Corrosive."
- Do not place cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.
- Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.
- If a cylinder is leaking around a valve or a fuse plug, move it to an outside area away from where work is performed and tag it to indicate the defect.
- Gauges and Regulators shall be kept clean and free of oil and grease.

## 22.7 Fire Watch



- Fire watchers are required whenever hot work operations are performed in non-designated locations.
- Fire extinguishing media will be immediately available to extinguish fires.
- Fire Watch shall be conducted during hot work and for 30-minutes after completion of hot work.
- Fire Watch may be required for opposite side of walls, above and below floors and ceilings.

### **22.8 Training**

- Supervisors and Managers are required to ensure personnel who perform hot work have received proper training. They are also responsible to ensure personnel are trained in the following areas:
  - This Hot Work procedure.
  - Fire extinguisher use.
  - Inclusion in the ASMG Respiratory Protection Program if they are required to use a respirator.
  - How to respond to emergencies (emergency numbers and alarm locations).
  - Confined space training, if personnel are required to work in confined spaces.
  - Personal protective equipment required for hot work tasks.

### **22.9 Permits**

- A Hot Work permit is required for each hot work project that is being conducted outside of an approved area at any ASMG facility.
  - Each Facility Manager may inspect and designate locations within their site where welding may be safely conducted.
  - The Facility Manager or designee shall inspect these sites on a regular basis to ensure there are no changes in conditions.
  - A list of all approved hot work locations shall be kept with the Facility copy of the ASMG Safety Manual and a copy shall be forwarded to the Safety Manager to be kept on file.
  - If welding is to occur outside of an approved site, a Supervisor or Manager shall formalize their approval by utilizing an ASMG Hot Work Permit.
  - The permits shall be filed with the Facility Supervisor or Manager and kept on file for one year.
  - Outside contractors are required to obtain permits from the Facility Supervisor or Manager BEFORE the beginning of any project.
  - During this process, the contractor will be made aware of any flammable or combustible materials they may encounter and relevant sections of the ASMG Safety Manual.
  - The contractor is required to complete a Hot Work permit before any work begins.



- If hot work is to occur in a confined space, a Confined Space Permit must be obtained from the Facility Supervisor or Manager prior to the start of any work.
- Such permit and any required Hot Work Permit shall be forwarded to the Safety Manager to be kept on file for one year.