

## MARION COUNTY SAFETY MANUAL ANNEX P – WELDING OPERATIONS

### Overview

Marion County employees may be required to perform welding, cutting or brazing operations occasionally. This annex provides guidelines for welding operation in Marion County. The department head or supervisor that authorizes welding operations is responsible for insuring that the welder is appropriately trained, certified and that all required personal protective equipment for the type of welding being conducted is on hand and used by the welder. These actions will be accomplished before beginning any welding operation.

### General Requirements

OSHA 29 CFR 1910.252 is the standard that establishes the basic safety requirements for fire protection and the protection of personnel. Prior to conducting welding operations, the individual responsible for authorizing welding operation will conduct an inspection to insure that all required precautions have been taken to protect the facility, welder and personnel in the area of the welding. A copy of this standard is included in Appendix Q1.

OSHA 29 CFR 1910.253 provides guidance on oxygen-fuel gas welding and cutting operations. This standard emphasizes that the oxygen is not to come in contact with oil and other contaminants. The combination of these elements could result in an explosive atmosphere. The standard also establishes requirements that require a special wrench to open the valve of a cylinder. This wrench will be left in place on the cylinder. The valve will not be opened more than one and a half turns, and the wrench is required to be left in place while the valve is open, in the event that an emergency occurs. A copy of this standard is included in Appendix Q2.

OSHA 29 CFR 1910.254 establishes the OSHA standard for arc welding and cutting. This standard provided guidance in four areas; selection and installation of equipment, proper instruction and qualification of operators, safety design criteria of arc welding equipment, and safe operations of arc welding equipment. A copy of this standard is included in Appendix Q3.

OSHA 29 CFR 1910.255 establishes the criteria for the safe operation of resistance welders and the procedures required to insure employee safety while operating resistance welding equipment. A copy of this standard is included in Appendix Q4.