APPENDIX E - Arc Welding (SMAW) and Cutting

When performing SMAW, the following rules will apply:

**Manual Electrode Holders**

- Only manual electrode holders specifically designed for arc welding and cutting of a capacity capable of safety handling the maximum rated current required by the electrodes may be used.
- All current carrying parts of the holder which are gripped by the welder or cutter, and the outer jaws of the holder, will be fully insulated against the maximum voltage encountered to ground.

**Cables and Connectors**

- Cables shall be completely insulated, flexible, and capable of handling the maximum current requirements of the work in progress and in good repair.
- Cables with splices or repaired insulation within 10 feet of the holder shall not be used.
- Where it becomes necessary to connect or splice lengths of cable together, insulated connectors of a capacity at least equivalent to that of the cable shall be used. When connections are affected by cable lugs, they shall be securely fastened together to give good electrical contact and the exposed metal parts of the lugs shall be completely insulated.
- The frames of arc welding and cutting machines shall be grounded either by a third wire in the cable connecting the circuit conductor or by a separate wire which is grounded at the source of the current.