

Medical Equipment Inspection Service

Medical Gas System Testing and Maintenance

Scope of Service

Annual Quality Assurance testing of the Medical Gas Piping Systems in accordance with Compressed Gas Association, TJC, EC. 127, EC. 1.3.7, EC. 1.5.7, EC2.3.7, and NFPA99-2001.

Inspection procedure/tasks performed on all medical gas systems at facility

- ✓ Manifold connected to two banks of cylinders that alternately supply the piping system.
- ✓ Each bank must have a pressure regulator and cylinders connected to a common header.
- ✓ Each bank must contain a minimum of two cylinders or at least an average days' supply.
- ✓ The secondary bank must automatically operate to supply the system when primary supply is depleted.
- ✓ The reserve in use pressure switch must be connected to the main alarm panel.
- ✓ Each pigtail must have a check valve.
- ✓ The cylinders must be appropriately restrained.
- ✓ All electrical fixtures must be at least five feet above the floor level.
- ✓ The storage enclosure, door and door frame must be "one hour fire rated."
- ✓ The storage area must be free from combustible materials.
- ✓ No storage of flammable gases is allowed in an oxidizer locations.
- ✓ The ambient temperature in the storage area must not exceed 130 degrees.
- ✓ No sources of heat other than steam or hot water are permissible in the area of the system enclosure.
- ✓ System pressure relief greater than the manifold pressure to be vented to the outside.
- ✓ The storage area must have 72 inches of free space.
- ✓ Vents to corridors must have "1 hour rating."
- ✓ No soft soldered joints are permissible on the piping system.
- ✓ Duplex line regulator assembly or by-pass assembly must be provided for the line regulator.
- ✓ All gauges must be labeled "use no oil."
- ✓ A pressure relief valve must be provided downstream of the line regulator.
- ✓ Pressure relief valve must be rated 50% above normal line pressure.
- ✓ A shutoff valve must be located downstream of manifold and within storage area.
- ✓ The source shutoff valve must be labeled for the source name.
- ✓ A shutoff valve must be provided in the mainline accessible from within the building served.
- ✓ A pressure gauge must be located downstream of the mainline shutoff valve and viewed from standing.
- ✓ A pressure switch for the mainline must be located downstream of the mainline shutoff valve.
- ✓ Minimum flow rates: Oxygen, Nitrous oxide, Medical air >99LPM, Nitrogen >149LPM, Vacuum >49LPM.

