# General Considerations for Hyperbaric Oxygen Supply

### Compliance

A hyperbaric oxygen facility consists of a pressurized chamber and related equipment used for medical procedures performed at pressures above normal atmospheric pressure.

Hyperbaric (HBO) facilities must comply with standards published by the National Fire Protection Association in their pamphlets or standards NFPA-50, NFPA-99, NFPA-55, NFPA-101 as well as Guidelines published by the Compressed Gas Association in CGA M-1. Review the issues related to HBO compliance before installing or making changes to a facility.

### Typical Gas-Source Supply Scenarios

### Scenario #1

*Installation of a dedicated oxygen system to supply the Hyperbaric Facility:*
No matter what type of facility you operate, proposed standards require an adequately sized reserve supply of oxygen IN ADDITION to the main tank. NFPA or CGA recommends a reserve supply whether or not the facility is located in a hospital.

### Scenario #2

*Installation of a Hyperbaric Facility tied into an existing oxygen supply system IF SUPPLIED AT THE SAME PRESSURE AS THE EXISTING SYSTEM, both the main oxygen source of supply and the reserve must be evaluated to ensure they are properly sized to supply the additional volume to the facility, without jeopardizing the existing pressure and flow requirements of oxygen to the patients, and the minimum 24hr reserve supply required by NFPA. IF SUPPLIED AT A DIFFERENT PRESSURE (usually higher), then*

1. The existing source of supply and reserve must be adequately sized to support the additional volumes (as above), and
2. A separate auxiliary dual-line regulator module/control cabinet with individual alarms must be located downstream of the reserve supply, or
3. A dedicated source of supply and reserve must be installed.

### Other Typical Gas Related Issues to be aware of:

In the NFPA's Standards, particular reference to the following issues should be considered. NFPA-99 Chapter 20 and NFPA-101:

- Shut-off valves must be installed at the point of entry to the chamber rooms.
- Storage and handling must meet the applicable NFPA-99 Chapter 5 requirements.
- The bulk installation must meet NFPA-50 requirements.

### NFPA-50, NFPA-55, requirements:

- Must conform to installation siting requirements
- All equipment must be designed and cleaned for oxygen service
- Piping must be tested

### CGA M-1 Requirements:

- Reserve supply for all installations
- Alarms as specified by NFPA-99

### Planning

If you are planning to install or modify a hyperbaric oxygen facility, call your Praxair representative early in the process. Praxair offers consultation, site-survey and system assessments to help round-out your planning to include all medical gases and related equipment.

The information contained herein is not intended to summarize all of the risk associated with the installation of a hyperbaric oxygen facility nor does it identify the most significant or material risks associated with such installation.