Compressed gases are commonplace at USC and play an important and vital role in instructional and research laboratories, medical facilities, fine arts shops, scientific diving areas, maintenance shops, and welding locations. However, they can be potentially hazardous owing to their inherent high pressure.

A few key safety points are discussed below:

Handling:

Use the appropriate pressure gauge with CGA fitting on the corresponding gas cylinder. Never use adapters to attach dissimilar CGA fittings. Make sure that the low-pressure side of the gauge has the correct pressure range for the application e.g. if 50 psig is required, then a 0 - 100 psig gauge should be used. **Do not oil or lubricate any part of the pressure regulator or cylinder valve.**

Do not use cylinders whose labels/tags become illegible and/or contents cannot be identified. Return the cylinders to the supplier. Always read and follow all precautions provided on the warning label.

Transport:

Before moving a gas cylinder, ensure that the valve cover is attached. Secure the cylinder to a suitable hand truck and avoid tipping the truck during transport. Never drop cylinders or allow them to strike each other or other objects. Do not roll cylinders on their side. Never store gas cylinders permanently on cylinder trucks.

Storage/Labeling:

Secure cylinders individually to the wall by two non-combustible restraints (metal cable, strap, or chain). Store cylinders in a dry, well-ventilated location away from open flames and heat sources.

Segment gases into their hazard classes (e.g. flammable, corrosive, etc.) and store separately. Label storage areas with appropriate signage e.g. flammable, corrosive, reactive, or toxic gases. Separate oxygen cylinders from fuel gas cylinders by a minimum of 20 feet.

Clearly mark empty cylinders with a tag or sign reading “Empty” or “MT”.

Use the EH&S Fact Sheets to facilitate safety discussions in your work area. Post the monthly topic on your bulletin board.