## Compressed Gas Cylinders

1. **Purpose**

To provide guidelines in the safe handling, storage and use of compressed gas cylinders.

1. **Labeling**

The contents of any compressed gas cylinder should be clearly identified so that the contents are easily, quickly, and completely determined. A durable label shall be provided that cannot be removed from the compressed gas cylinder.

No compressed gas cylinder should be accepted for use that does not identify its contents legibly by name.

If the labeling on the gas cylinder becomes unclear or defaced so that the contents cannot be identified, the cylinder should be marked "contents unknown" and the manufacturer contacted regarding appropriate procedures.

1. **Use and Handling of Cylinders**

Only tools provided by the supplier should be used to open and close cylinder valves.

If cylinders cap cannot be removed by hand, tag cylinder “Do Not Use” and move to the cylinder storage area for return to vendor.

Open cylinder valves SLOWLY. Do not use a wrench to open or close a hand wheel type cylinder valve. If it cannot be operated by hand the cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.

Attach the regulator securely before opening the valve wide. Always use a cylinder wrench or another tightly fitting wrench to tighten the regulator nut and hose connections.

Before the regulator is removed from a cylinder, close the cylinder valve and release all gas from the regulator.

Leaking cylinders should be moved to an isolated, well ventilated area, away from ignition sources. Soapy water should be used to detect leaks. If the leak is at the junction of the cylinder valve and cylinder, do not try to repair it. Contact the supplier and ask for response instructions.

Cylinders should be marked as "MT" and dated when empty. Never mix gases in a cylinder and only professionals should refill cylinders. Empty cylinders must be handled as carefully as full cylinders.

1. **Storage**

Cylinders must be secured at all times in such a way as to avoid them being knocked over or damaged, must be stored in a vertical position, not stored in public hallways, and segregated based upon contents.

20 feet should be maintained between oxidizers and flammables or firewalls erected at least 5 feet high and with a fire rating of 30 minutes. Never store cylinders hear highly flammable substances such as oil, gasoline, waste, etc. Smoking, open flames and similar sources or ignition should not be permitted in filling or storage areas.

Cylinders must be protected from damage, corrosion, sunlight, kept away from heat sources and capped when not in use.

Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards.

Storage areas for full and empty cylinders must be designated and labeled. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways.

1. **Transporting**

Cylinders must be transported in a vertical secured position using a cylinder basket or cart, and must not be rolled.

Regulators should be removed and cylinders capped before movement.

Cylinders should not be dropped or permitted to strike violently and protective caps are not used to lift cylinders.

Cylinders should not be transported with the regulator attached to the cylinder.

Always use a cylinder cart to move compressed gas cylinders. Refrain from sliding, dragging or rolling cylinders on edge.

1. **Inspection**

Visual and other inspections shall be conducted to determine that compressed gas cylinders are in a safe condition.

Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.

1. **Training**

Employees must be trained on the proper use, handling and storage of compressed gas cylinders.