

Compressed and Liquefied Gas Safety Program

Introduction

Compressed gases have the potential to create a hazardous working environment. This safety program provides guidelines in the proper handling, storage and disposal of compressed gases to minimize risk to Normandale's employees, students, visitors as well as the campus facilities.

Storage

Proper storage is critical for the safe use of compressed gases. All storage areas should be properly identified and the cylinders should be properly labeled with the appropriate NFPA 704 diamond and the gas name prominently displayed.

Storage Requirements

All gas cylinders:

- Should not be stored in exits or egress routes
- Should be in a well ventilated area
- Shall be directly delivered to labs
- Should not be stored in Shipping and Receiving except during the delivery process
- Should always be stored in the upright position
- Should be stored with a chain at the midpoint or higher, but below the shoulder of the tank
- Should be capped when not in use
- Should be a minimum of 20' away from flammable, combustible or incompatible substances

Handling

The following requirements and/or policies are in place to ensure the proper handling of compressed gasses:

- ❖ Compressed gasses will only be handled by Normandale Staff who has completed the Lab Safety Program which describes the aspects of the campus Chemical Hygiene/Lab Safety plan
- ❖ Cylinders should be transported by an appropriate cart designed to move cylinders. They should never be dragged or carried
- ❖ Safety shoes should be worn when transporting cylinders
- ❖ The vendor shall be responsible for transporting the cylinders to each lab. Our shipping and Receiving Staff responsibility is to notify the appropriate department and to acknowledge the receipt of the gas only
- ❖ Cylinders should never be picked up by the cap
- ❖ Damaged or leaking cylinders should be reported immediately to Security (ext555) and Building Services (ext 8110)
- ❖ Whenever possible, the vendor should be responsible to hook up the cylinders
- ❖ Before handling compressed gasses are familiar with the appropriate MSDS sheets.

Use

The following policies/procedures apply to the use of compressed gasses at Normandale:

- The valves on gas cylinders should be in the “closed” position when not in use
- Never allow heat or flames to come into contact with a gas cylinder
- Valves should only be open to the point where gas can flow at the appropriate pressure necessary pressure. This will allow for a quicker shut off in the event of an accident
- Never use a corroded valve
- Never use a cylinder as compressed air



- o Never change fittings
- o Cylinders requiring a wrench to open should leave the wrench in place when the cylinder is open
- o Never pry off a stuck cap. Return it the vendor
- o Never use Teflon tape on metal to metal connections

Disposal

This section applies to the disposal of compressed gas cylinders:

- + Purchase compressed gasses only from vendors that agree to take back the empty cylinder
- + Proper labeling even on empty cylinders is required
- + Leave the cylinders in the lab until the vendor arrives

Emergencies

Normandale's Security Department should be immediately notified in the event of any leaks and will determine the need to evacuate or call for additional help according to the campus "all Hazards Plan". If the leak is known, please immediately evacuate and contact Security from the nearest emergency phone outside of the affected area. Campus staff using the compressed gasses should be familiar with the safety policies and Material Safety Data Sheets prior to using the gases.

Training

Compressed gas use and training is provided as part of Lab Safety Training annually.

Campus Inventory

An inventory of compressed gasses used at Normandale is maintained by the Campus Safety Officer.

Reviewed 5/11/2015