

**SECTION 8: SPECIAL COMMODITY PROCEDURES**

**SUBJECT: CYLINDER GASES**

**Procedure 8.9**

**POLICY:** Cylinder gases purchased at UW must follow all Environmental Health and Safety (EH&S) regulations to ensure on-campus safety. EH&S requirements include labeling, physical condition, chain of custody, shipping, storage, and disposal requirements.

**PROCEDURE:**

Departments should purchase cylinder gases from UW contract suppliers whenever possible to ensure compliance with all EH&S standards. All toxic gases must be purchased through Praxair.

All cylinder gases purchased for use on the UW campus must be clearly labeled. Labels must list the contents, their concentration, their hazard classification(s), safety precautions and the manufacturer of the contents. Labeling should not be removed.

Cylinder gases are considered hazardous materials. All shippers of hazardous gases must be trained and certified. Any shipment of cylinder gases must include:

- A return authorization from the gas manufacturer
- Material Safety Data Sheet for the product being shipped
- Hazardous Material Shipping Paper
- Emergency Response Information for the product being shipped
- Cylinders that meet DOT specifications, but that are packed in additional outer packaging, must have a notice attached reading "Inside container(s) comply with prescribed regulations" as per 49 CFR 173.306
- 2.3 Poison Gas cylinders may require, in addition to the above, a 2.3 Poison Gas placard for the transporter and the cylinder may need to be certified as shippable.

The department must coordinate with the vendor for delivery and avoid leaving cylinder gases unattended. Departments are not permitted to store toxic gases on loading docks or other temporary locations unless approved by EH&S. If cylinders are transported after shipment, proper PPE should be worn, cylinders must be capped and should be transported using hand trucks.

Departments are responsible for ensuring that all storage requirements will be met prior to purchasing compressed gases. EH&S has published guidance that includes a detailed list<sup>1</sup> of storage requirements.

Cylinders owned by suppliers may be returned after use. However, cylinders of toxic or flammable gas that are not empty typically cannot be returned to a supplier and must be disposed of as hazardous waste. Cylinders of nonhazardous normal constituents of air may be emptied according to EH&S guidelines and disposed of as scrap metal through UW Recycling and Solid Waste.

---

<sup>1</sup> Available at: <http://www.ehs.washington.edu/fsolahzmat/gascylinders.shtm#storage>