



WELCOME TO OUR

Research Safety Newsletter

we're so glad you're here!

**You or someone you know
could be our next
College Research Safety
Coordinator.**

[Apply Now!](#)

- **Qualification:** Bachelor's degree in a job related field and 3 or more years of job related experience.
- **Preferred experience**
 - Working in a highly collaborative environment, and delivering exceptional customer service.
 - Serving on committees.
 - Conducting experiments involving hazardous materials.
 - Conducting laboratory safety inspections or consultations.
 - Conducting in-person training and developing professional reports.
 - Writing or reviewing research protocols and standard operating procedures.
 - Collecting and analyzing data.
 - Eager to learn new research lab safety principles and practices to successfully fulfill duties.

Hazard and Risk Alert

A single unsecured or mishandled cylinder can

- become a high-velocity projectile,
- cause asphyxiation in confined spaces,
- trigger fires/explosions, or
- release toxic/corrosive contents.

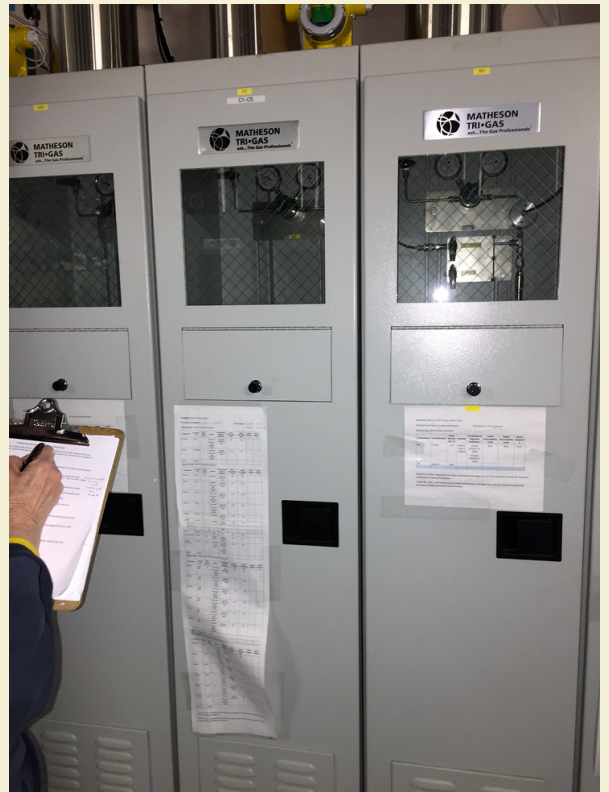
Following established safety practices aligned with OSHA 29 CFR 1910.101, NFPA standards, Compressed Gas Association (CGA) guidelines, and [USC policies for compressed gases](#) helps prevent incidents and keeps our USC community safe.



Controls and Best Practice Alert

HANDLING TOXIC OR CORROSIVE GASES?

- Write a standard operating procedure for the specific use of each gas. Include cylinder changeout procedure.
- Purchase amounts reasonable for your needs.
- Store in and dispense from a certified gas cabinet.
- Install sensors at both the release point and the point of use, and when possible, integrate them with a detection system connected to the building's fire panel to enable alarm notifications.
- Perform periodic leak test of your gas system especially prior to performing every experiment.
- Ensure that the system conditions are stable prior to leaving a long-term unattended experiment.



HANDLING ANESTHETIC GASES?

- Use a properly functioning scavenging system (example below) or
- Perform procedures in a certified chemical fume hood, hard-ducted biosafety cabinet (Class II B2), or downdraft table.
- Avoid open-drop methods (e.g., bell jars) without scavenging, or outside of a ventilated enclosure as they pose high exposure risk.
- Fill vaporizers in a fume hood using anti-spill adapters to avoid spills.
- Perform regular leak checks on equipment (e.g., hoses, valves, gaskets) using soapy water or pressure tests.
- Purge induction chambers with oxygen/air before opening, and stand back when accessing animals.



Frequently Asked Questions

My chemical fume hood keeps alarming (or has other problems such as no airflow, sash is broken, lightbulb is out, etc.) what should I do?

- Stop using the fume hood.
- Put in a work request for fume hood repair [here](#).
- If work involves accessing interior of the fume hood, clear and decontaminate the fume hood interior. Download, complete and post the [fume hood decontamination form](#).
- Once repaired, contact jlocke@mailbox.sc.edu to get the fume hood recertified.

How do I dispose of hazardous (chemical waste) from experiments?

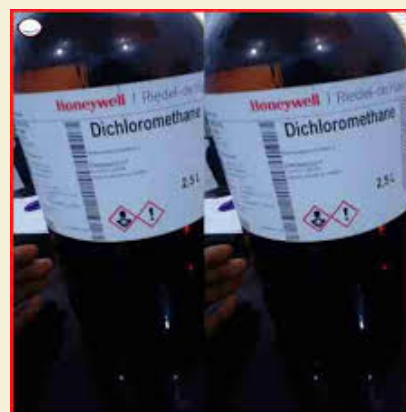
- Collect in compatible plastic carboy issued by EH&S.
- Attach the EH&S hazardous waste label. Include all chemical components with their respective percentages, mark the appropriate hazard categories (corrosive, flammable, toxic, or oxidizer), and record its pH.
- Put in a request for hazardous waste pickup through [Campus Optics](#).

How do I dispose of broken glass?

- Collect non-contaminated broken glass in a thick medium-sized cardboard box lined with heavy duty trash bag.
- Once the box is full, tape the flaps securely to prevent it from opening then label the box with "Non-contaminated Broken Glass".
- Dispose the box in the nearest dumpster.

How do I recycle or dispose of old equipment?

- Download and complete the [Equipment Decontamination form](#).
- Decontaminate equipment as instructed on the form.
- Attach form to the equipment.
- Move equipment to recycling or dispose as planned.



Sign up!

SPRING SEMESTER TRAINING

Mark your calendars! Do not miss any safety training required to work in our laboratories. New dates are available for Chemical Lab Safety, Hazardous Waste, X-ray Safety, Laser Safety, BSL-2 and others!

[TRAINING SCHEDULE](#)

Regulatory Update

EPA TSCA DCM RULE

The EPA Toxic Substances Control Act Dichloromethane Rule requires that labs using this substance prepare a written exposure control plan (ECP). Current SOPs should explicitly state the alternative substances that were evaluated and that no suitable substitute was found.

[PREPARE YOUR SOP!](#)

Safety in the News

- New Amendment to the OSHA Hazard Communication Standard aligns with the UN GHS Revision 7.
- Toxic gas scare prompts investigation into UH student worker's late-night lab access.
- Former UH researcher gets \$6.7 million settlement for lab explosion injuries.

Contact us today

HAVE ANY QUESTIONS ABOUT CHEMICAL AND LAB SAFETY?

Jocelyn Locke jlocke@mailbox.sc.edu
Adam Roberge aroberge@mailbox.sc.edu
Dexter Reasons dreasons@email.sc.edu

[LET'S CHAT!](#)