



Campus Administrative Policy

Policy Title: Flammable Gases Policy and Procedures (OPP: 103-101)

Policy Number: 3077 Functional Area: Facilities

Effective: February 22, 2018
Date Last Amended/Reviewed: December 1, 2017
Date Scheduled for Review: July 1, 2025
Supersedes: Flammable Gases (August 2001)

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Authority Having Jurisdiction for Fire and Life Safety
(February 22, 2018)

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Applies to: CU Anschutz
CU Denver
CU South Denver Location

A. POLICY STATEMENT

The use of flammable gases in the laboratories (and in other areas on campus), requires certain safety precautions be observed in order to reduce the risk of fires and explosions. This document provides the necessary guidance for use of such gases.

B. PURPOSE

To establish a policy for safe use of flammable gases on campus property.

C. PROCEDURES

General Safety

Many of the laboratories have piped natural gas to the rooms. Natural gas contains an odorant that smells like rotten eggs (methyl mercaptan). Should you detect this smell in one of the university buildings, move to a safe area and immediately notify the Facilities Management Customer Service Desk at (303) 724-1777 or University Police (9-1-1 from campus phone). You will need to remain available in a safe location to provide responders with information.

It is very important to spend a few minutes at the beginning and end of the day checking your work-area for operations that might create hazards if not secured. Check all natural gas valves to be certain they are in the closed (off) position. Prior to using Bunsen burners or other heat-producing devices, check the tubing (for cracks and splits), valves, and burner for defects. Do not use equipment that is suspected of having faulty parts or operational problems. Never leave the area unattended during heating operations. NOTE: You must be in attendance whenever open-flame devices are in use.

Propane and Other Gases

The use of propane cylinders within buildings is limited to small lecture-sized bottles. Barbecue sized propane cylinders (20 lb. units) are NOT ALLOWED inside of buildings by Fire Codes. If your lab does not have natural gas outlets, you may purchase disposable propane gas cylinders that have a capacity of NO MORE THAN 2.5 pounds. Butane and natural gas cylinders are also available in these small (generally 14—oz.) cylinders. Please check with one of the laboratory supplies companies for information.

Some laboratories use hydrogen and/or acetylene gases. As with all compressed gas cylinders, ensure that the cylinders are secured from falling. Adequate ventilation is required in areas where flammable gases are used and use of these gases is generally restricted to within the ventilated fume hood.

Natural gas, hydrogen and acetylene are lighter-than-air gases, and as such, will generally be removed from the room by the action of the ventilation system. Propane is a heavier-than-air gas, and therefore any leakage will cause gas accumulation at the lower areas of the room.

Storage of flammable gases is also governed by the fire codes. If you are storing more than two small units, we suggest contacting the Campus Fire Marshal (number noted below) for guidance or Environmental Health and Safety (EH&S) (number below).

For further clarification or assistance, or to request an evaluation of your laboratory, please contact EH&S at (303) 724-0242 or the Campus Fire Marshal at (303) 724-0493

Notes

1. Dates of official enactment and amendments:
August 2001: Adopted/Approved by Associate Vice Chancellor for Facilities
February 22, 2018: Revised
December 18, 2019: Reformatted
2. History:
December 18, 2019: Reformatted to reflect a Campus-wide effort to recast and revitalize Campus policy sites into a standardized and more coherent set of chaptered policy statements organized around the several operational divisions of the university. Links, university branding, and formatting updated by the Provost's office.
3. Initial Policy Effective Date: August 2001
4. Cross References/Appendix:
 - [2015 ed. International Fire Code](#)
 - National Fire Protection Association (NFPA) Life Safety Code
 - Campus Policy 3003, Authority Having Jurisdiction for Fire Prevention and Life Safety