Chemistry Safety Notes

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"Chemistry Safety Notes" is published by the Chemistry Dept. Safety Committee, written & edited by Debbie Decker, Safety Mgr.

Department Self-Inspections

Beginning October 10, Pauline Serrano and I will begin the annual department self-inspections. We'll be accomplishing inspections on Monday afternoons, Tuesday mornings and all day on Friday. Pauline is setting up a Google calendar to schedule inspection appointments or you can email me directly to snag a spot for your lab. We'll set appointments in 90 minute increments, recognizing we probably won't need that long. The lab will be inspected and documentation audited. We'll be (nominally) using the self-inspection checklist we've used before. A couple of items you can work on right now:

- Make sure you have developed a lab-specific, Laboratory Safety Plan, using the new template from EH&S.
- Make sure all lab workers are incorporated into LHAT and have had Fundamentals of Lab Safety training.
- Make sure you are storing less than 10 gallons of flammable liquids in the lab. Inventory over 10 gallons needs to be in a flammable liquid storage cabinet. This includes hazardous waste.
- Make sure you have implemented the new hazardous waste management program (WASTe) and all hazardous waste is labelled with the new labels.

Welcome Back to School

A couple of reminders as we head back to school:

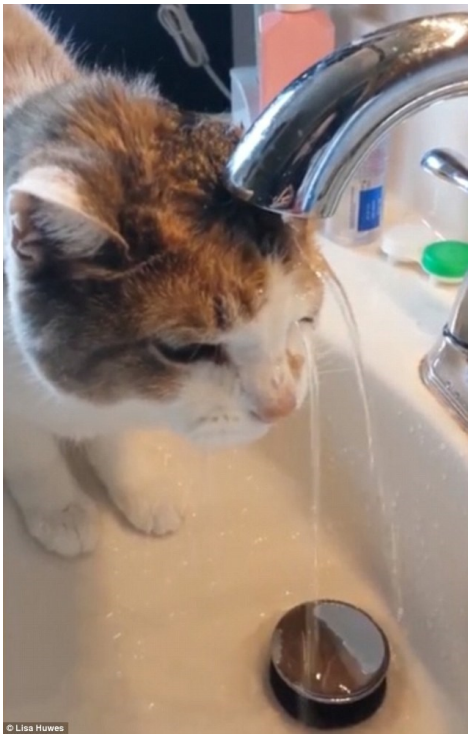
- Covered legs and covered feet while in the lab.
- Safety glasses worn when in the lab.
- Lab coat, gloves and additional safety gear when working in the lab.
- New folks need to have taken "Fundamentals of Lab Safety" ***before*** beginning work. They will also have to have lab-specific orientation training.

Demo Request Process

The process for requesting demos for teaching has changed. Eric Rosario is now managing the process and is ready to help you select the proper demo for your class. Please visit this link to review the list of demos and make your request. If there's a demo you want to do and it's not on the list, please email Eric directly (eprosario@ucdavis.edu) to add a demo.

Leaky Faucets

Drive us crazy! If you have a leaky faucet in your lab or work area, please email mkgagnon@ucdavis.edu with the room number and Karen will make sure Facilities is informed.



New Emergency Contact List

A new emergency contact list has been released—on electric green paper. You should replace the pink ones (or yellow or orange, if you have even older ones) with the new green ones.

There's a stack in the copy room and more in an envelope on my office door.

Training Requirements

For New Folks: Use the safety orientation checklist.

For Everyone Else: Annual training on the campus-wide Lab Safety Manual/Chemical Hygiene Plan, Department IIPP, EAP and the lab-specific Safety Plan.

Every three years: Lab Safety Fundamentals Refresher, review SOPs.

Ongoing (in the context of group meetings): Safety topics and issues, specific to the lab. Reviewing near misses and new procedures or hazards is required. Going over the Safety Notes and how they apply to the lab is a good idea.

Annual Chemical Inventory Update & CUPA Self-Audit

You should have received an email about updating your chemical inventory. All solid and liquid hazardous chemicals/mixtures greater than 1 gram (g) or 1 milliliter (mL) must be included on the inventory. Any amount of compressed gases, acutely toxic substances, carcinogens, reproductive toxins, select agent, perchlorate material, and chemical facility anti-terrorism standard (CFATS) chemicals of interest must also be included.

All CIS account owners update their chemical inventory and complete the CUPA Self-Audit checklist no later than Friday, January 13, 2017. The checklist must be completed annually as required by the CUPA Self-Audit Program and be made available upon the request of the CUPA inspector. Retain records for at least three years. You do not need to submit copies to Environmental Health and Safety or to the Department.

The Chemical Inventory System and CUPA Self-Audit program can be accessed at http://safetyservices.ucdavis.edu/ps/hmhwm/cis. Please review the CIS-FAQs, User Guide and PI Training Guide prior to accessing and updating your inventory. After your inventory is updated, certify your inventory by following the instructions below:

1. Log into CIS at https://ehs.ucop.edu/cis
2. Select PI Information tab
3. Scroll down to bottom of page
4. Select a date from the calendar icon located to the right of the certification date field
5. Select Save Changes

Please contact cis@ucdavis.edu with any questions.

Consumption of Alcohol—A Reminder:

Policy and Procedure Manual 270-21 states the service of alcohol at any group-sponsored event on University-owned property requires approval of a Permit to Serve Alcoholic Beverages. Service will be complementary to the group-sponsored event. Groups will assure nonalcoholic beverages and food are available during the time alcohol is served. Attendance will be limited to members of the sponsoring group and their personally invited guests or conference participants. Alcohol service is normally limited to the following times: after 4:00 PM on weekdays, 11-2:00 PM when accompanied by a luncheon and after 11:00 AM on weekends or administrative holidays.

The consumption of alcoholic beverages is permitted only in the following locations and circumstances:

In individual residence rooms, residential apartments, and residential houses on University premises at the discretion of the occupants and in accordance with Student Housing policy and State laws.

In the Gunrock Pub, consistent with University policies and licenses issued by ABC.

At events where a one-day license has been obtained.

At group-sponsored events for which a Permit to Serve Alcoholic Beverages has been approved, and only in the area specifically designated on the permit.

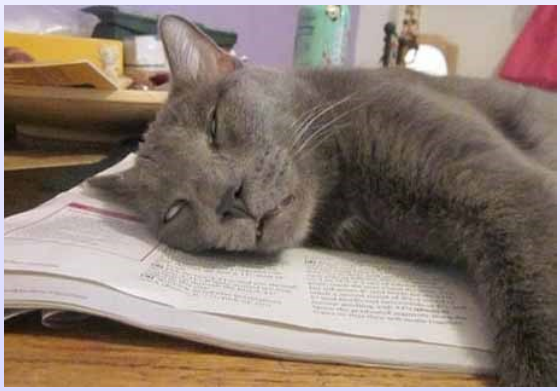
If you are planning an event/group meeting/other where alcoholic beverages will be served, please work with Jessica Potts to obtain a one-day license.

And while we're on the topic …

Information has come to my ears about folks working impaired; whether by alcohol, prescription medication, illicit substances, or from extreme fatigue. This is really dangerous—from many perspectives.

If you notice a co-worker or colleague struggling with issues of substance abuse, please encourage him/her to seek help from the resources available. Employees seeking support or treatment programs may contact Academic and Staff Assistance Program (ASAP); 752-2727. Students seeking support or treatment programs may contact Alcohol Tobacco and Other Drugs Program, 752-6334, or the Counseling and Psychological Services: 752-0871. Sometimes, offering to accompany a colleague or co-worker as they seek help is what a struggling person needs.

Extreme fatigue can also be an issue and can present symptoms similar to impairment. The Army Corps of Engineers recognizes this safety issue and has developed some guidance. A "Fatigue Management Plan should be implemented whenever work hours:



(1) Exceed 10-hours a day for more than 4 consecutive days;
(2) Exceed 50-hours in a 7-day work week;
(3) Exceed 12-hours a day for more than 3 consecutive days, or
(4) Exceed 58-hours a week for sedentary (to include office) work."

Starts to sound like graduate school hours! The Army Corps recommends a minimum of 8-hours rest in any 24-hour period. The Corps goes on to define "rest" as "off duty; not performing work, including administrative tasks; and affording the opportunity for uninterrupted sleep." (*Ref: 30 Nov14 edition of the US Army Corps of Engineers "Safety & Health Requirements Manual," EM 385-1-1).*

Self-care is important. Taking time off is critical to maintain perspective and give your brain a break. Sometimes, creative solutions will present themselves when you are away from work.

New Safety Guidelines from ACS

A new set of safety guideline documents have been published by the Committee on Chemical Safety, ACS. The first, *Guidelines for Chemical Laboratory Safety in Secondary Schools*, is intended for high school chemistry teachers. The second, *Guidelines for Chemical Laboratory Safety in Academic Institutions*, is intended to help faculty and staff to develop, enhance and assess the safety education of their students. Critical to both documents is the RAMP concept for scientific safety, developed by Hill and Finster in their textbook, *Laboratory Safety for Chemistry Students* (Source: Hill, R. H.; Finster, D. C. *Laboratory Safety for Chemistry Students;* John Wiley & Sons, Inc.: Hoboken, NJ, 2010; p 1-7)

RAMP stands for:

- **R** Recognize the hazards
- **A** Assess the risks of the hazards
- **M** Minimize the risks of the hazards
- **P** Prepare for emergencies

We are distributing the *Guidelines for Chemical Laboratory Safety in Academic Institutions* to Teaching Assistants, as a way to encourage a culture of safety in classroom laboratories. We have good compliance with the safety rules but maybe we don't have enough understanding of why the rules exist. This technique can also be used to implement safety requirements for research projects.

Over the next few months, we'll be working on how best to implement this concept in the Department. Your feedback and suggestions are always welcome.

Spooktacular is coming up!

Please join the Department for Spooktacular on October 28th. Food, drink, costume contest, Halloween-themed (It's not Magic, It's Chemistry) Magic Show. Promises to be a spooky good time!

Stay tuned for more details.