

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.

Fire Code Compliance

The Fire Marshal's office has completed their inspections of the chemistry complex and corrective actions have been distributed to the various groups for correction. Please accomplish the corrective actions, capture an image (as appropriate) and reply to me with your attestation of correction.

Corrective actions need to be completed **before May 18th!** If you don't think you can make that deadline, please let me know. If a repair is in progress, that's fine—we just have to show progress with a schedule for completion.

Newsletter Survey

I've been at this newsletter thing for awhile and it occurs to me I don't know if the readership finds it useful or if it adds value to the overall safety culture in the Department.

To that end, I've created a very short (Very!) survey to collect some information. Please access the survey [here](#).

Responding to the survey, answering the question and offering a comment gets you entered into a drawing for swag. No comment – no entry!

E-Waste Event

Hot off the presses!

Aggie Surplus will offering a free e-waste drop off event on May 17th from 11:00-2:00 at Mail Division, 615 Hopkins Rd.

E-WASTE

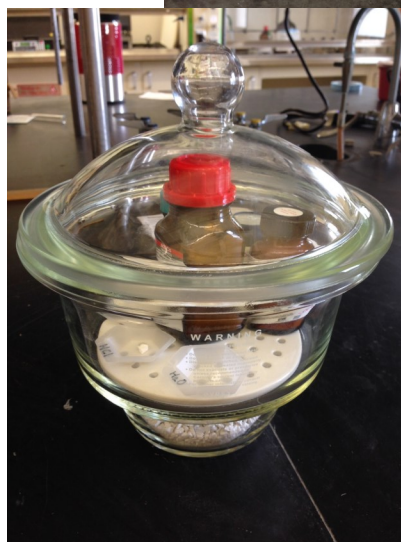


Storage of the Particularly Hazardous

Over the past year or so, there's been confusion around how to store oxidizers, water reactives and pyrophorics.

Pyrophorics and water reactives **may not** be stored with flammable liquids. Similarly, oxidizers **may not** be stored with flammables or with pyrophorics/water reactives.

Here are some examples of proper storage of these materials. Using desiccators as secondary containment is a great idea. Also, setting aside a drawer with "lock 'n' lock" secondary containment is good practice. For pyrophorics dissolved in a flammable solvent and which also need to be refrigerated, a separate Lab-Safe refrigerator is required. The small dorm-sized refrigerators can also be used for hydrogen peroxide. In the case of oxidizers, the fridge doesn't have to be Lab-Safe.



Flame Sterilization

For those of you who use flame sterilization techniques in your work, a [Standard Operating Procedure template](#) has been developed for your use. The primary hazard of flame sterilization is the use of an open flame in close proximity to an open container of ethanol. This creates a significant risk of an unintended fire.

Laboratories that follow the procedures described in the SOP and do not exceed the 100 ml volume limit, may opt out of the Laboratory Hazard Assessment Tool (LHAT) PPE designation of a Flame-Resistant (FR) laboratory coat for the active researcher.

Note: If you must perform this procedure while alone in the laboratory you are **NOT** exempt from the FR laboratory coat requirement.



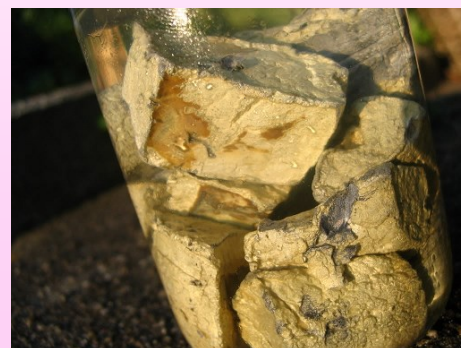
Fire Code Compliance Tip Regulators on Cylinders

If a cylinder is not in use, please remember to remove the regulator and replace the protective cap over the valve. This is one of the most common corrective actions noted during the Fire Code Inspection.

Potassium Gone Bad

Please have a critical look at elemental potassium and be sure it's not past its expiry date or it hasn't become peroxidized and discolored. As with other peroxidizable materials, potassium can form potentially explosive compounds with time and under certain storage conditions.

[Safety Net #23](#) has good guidance, as does this document from [SAFSU](#).



The Safety Ethic

I value safety, work safely, prevent at-risk behavior, promote safety, and accept responsibility for safety.

Credit to Dr. Robert Hill, Past Chair, Committee on Chemical Safety and Division of Chemical Health and Safety

Annual EH&S Lab Safety Reviews

Guest Column from Karen Gagnon, EH&S Liaison to Chemistry

It's that time of year again: spring is here, the weather is getting warmer, allergies are in full swing...and it's time for the annual EH&S lab safety reviews! The lab safety reviews for the Chemistry department are conducted annually in May, June, and July. Thanks for the swift response of PIs and safety representatives in scheduling their May lab reviews!

Let's take a look back at the top ten findings for the Chemistry Department for 2016.

1. Hazard assessment (LHAT) not up-to-date and/or reviewed.
2. Chemical containers not clearly labeled with contents and primary hazard(s).
3. Chemical inventory has not been completed or updated within past 12 months.
4. Incompatible chemicals are stored together.
5. Hazardous waste not properly labeled.
6. Time sensitive chemicals/peroxide formers stored inappropriately.
7. Emergency Action Plan, Injury & Illness Prevention Plan not available & training not documented.
8. Laboratory ventilation pressure is positive with respect to corridors and offices.
9. Spill response training (SafetyNet #13) is not documented.
10. Training on the campus Chemical Hygiene Plan is not documented.

Here's a brief rundown of how to avoid having these findings show up on your report.

(i) Please make sure your LHAT is correct (update the Chemical Hazards section of the LHAT to reflect any new hazards that have been introduced over the year), check the roster is up-to-date, and check everyone has viewed the current assessment.

(ii) Annual training is required for the IIPP, EAP, Chemical Hygiene Plan, and spill response (SafetyNet #13). Make sure the training is documented!

(iii) The Chemical Hygiene Plan details how chemical containers should be labeled (i.e., the name of the contents and the primary hazard), as well as storage considerations for ensuring chemical compatibility (the Stanford Storage Group Classification System is useful for this purpose).



Remember labs can always access the [Laboratory Safety Review Checklist](#) online to prepare for the lab review. If you would like more information regarding these findings, or have any questions leading up to your review, please feel free to contact Karen anytime.

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