EH&S Presents…

LSR Quarterly Meeting

Thursday, February 28, 2013

Agenda

- EH&S Announcements
- UC Lab Safety Settlement Update
- Cal/OSHA Inspections
- Lessons Learned
- Green Labs Presentation

EH&S Announcements

EH&S Announcements – Hazardous Waste

- Chemistry Department Onsite Lab Pack
  - Take chemicals to PSB 459 on Monday 3/4
- PBSci Waste Containers at Thimann Stockroom
- Unacceptable Container Storage

EH&S Announcements – Biosafety

- Chemotherapeutic Agents in:
  - Tissue Culture
  - Animals

Send list of compounds that you use to biosafety@ucsc.edu

- If in general lab use, dispose through OTP

EH&S Announcements – Laser Safety

- Laser safety team creating campus inventory

- See Marcus Balanky at end of meeting to provide inventory information

EH&S Announcements – Chemical Inventory

- Students are currently taking inventory in the Chemistry Department.
- ChemTracker training is available by request.
- Current inventories will be emailed to lab managers when completed.
- Students are available to assist with taking inventory for lab pack items and in areas they are not allowed to access alone.

EH&S Announcements - Shipping

- Hazardous Materials
  - Chemicals
  - Infectious agents
  - GMMOs
  - Even small quantities regulated by DOT/IATA
  - Contact EH&S 2 weeks in advance

- Dry Ice – follow procedure document or contact EH&S for assistance

EH&S Announcements – Lab Inspections

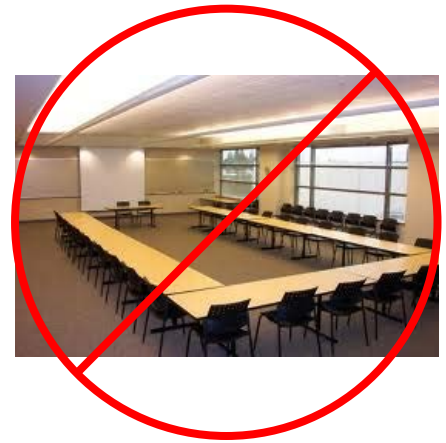
- 2012 Summary Coming Soon
- 2013 – Focus on Training, SOPs, and PPE

Next:
- Physics
- Engineering

Then:
- Environmental Studies
- Anthropology

UC Lab Safety Settlement Update

- Lab Safety Training



  - UC Learning Center (learningcenter.ucsc.edu)
  - If trained prior to 2010, must take online course
  - UCOP Lab Safety Training Policy (03/13)

UC Lab Safety Settlement Update

- Standard Operating Procedures (SOPs)
  - “Particularly Hazardous Substances”
    - Carcinogens
    - Reproductive toxicants
    - Acutely toxic chemicals
    - High physical hazard materials (corrosives, pyrophorics, etc.)
  - New UCSC SOP template
    - Process-focused

UC Lab Safety Settlement Update

- Personal Protective Equipment (PPE)
  - UCOP PPE Policy (03/13)

    All labs:
    - Long pants
    - Closed-toe shoes
    - Protective eyewear
  - Lab coats

Cal/OSHA Inspections

- ☑Read Poster & Share with Lab Group
- ☑Immediately contact EH&S at 9-2553
- ☑Provide neutral, fact-based answers
- ☑Be prepared to show the IIPP (Slug Binder) and Lab Safety Manual (online)
- ☑NO opinions, guesses, arguments, etc.

Lessons Learned

Ethyl Acetate Spill

- On Friday, 2/8, at approximately noon, a researcher was transporting an un-opened four liter container of Ethyl Acetate in an open-topped secondary containment "bump bucket" per standard practice.
- While opening the door, the bucket slipped and landed upright on the floor then tipped over. The glass primary container broke and most of the Ethyl Acetate spilled out onto the floor.
- At this point, a by-stander called me on my cell phone and I instructed them to immediately clear the area and call 911 - I was in Oakland at the time.
- In any volatile organic solvent spill, there is always the threat of a fire if the vapors contact an ignition source. The larger the spill, the greater the threat.

–**For future reference:** *Four liters of highly flammable material spilled in a hallway always warrants a building evacuation via pulling the fire alarm and an immediate call to 911 from a safe location.*

- The open-top bump bucket is insufficient for transporting hazardous materials (concentrated corrosives, flammables, etc.) to contain the material if dropped.
- The accepted methods of transport include using the closed "cone top" bottle carriers with a heavy duty wire bail type handle or in a tub on a cart (especially for multiple containers).
- Always buy hazardous chemicals in Safe-T-Cote or other coated bottles if available.
- The extra cost, effort or minutes required are more than paid for by avoiding such events.

Lessons Learned

Ethyl Acetate Spill – Remember:

- ***For any health threatening spill or release, (or if unsure) CALL 911***
  - ***Immediately clear the affected area and pull the fire alarm or CALL 911 from a safe location.***
  - ***If it is safe to do so, secure the area by closing doors or hood sash.***
- ***Do NOT attempt to clean up any spill for which you are not trained and equipped.***
- ***Call 911 to alert them that there is a spill and that you need assistance.***
- *If you know the location, materials involved and/or other details of the event, identify yourself to an Evacuation Coordinator (EC) or Emergency Responder - either EH&S or Fire - to communicate the critical information.*
- *Call 911 from a safe location immediately after evacuating if there are no Responders or ECs on site.*

Lessons Learned

Remember: Use Secondary Containment for transporting within or between buildings:

- ☑ In a tub, on a cart; or
- ☑ For Single Bottle:

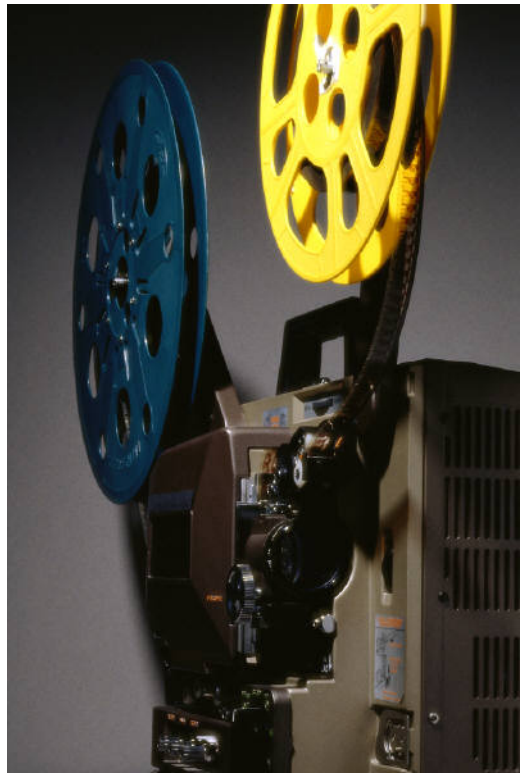
Enclosed container that will retain liquid if dropped.

Lessons Learned

Dispensing Liquid Nitrogen

- Complete Training (LMS)
- Always Wear PPE
  - Proper Lab Attire (*Shoes, Pants, Lab Coat*)
  - Cryo-gloves
  - Face Shield
- Open Valve and turn back ≥ quarter turn
- Keep valve moving to prevent freezing
- Do NOT open valve all the way and leave it for a long fill.
- Report any broken or malfunctioning Dewers

Green Labs Presentation



Questions?