

The meeting started with introductions of EH&S personnel and around the room.

1. Open Question / Answer time (all)
No questions were posed during this time.
2. Annual Lab Inspection Process (Thomas Lee)
 - a. Quarterly schedule – Chemistry and METOX lab evaluations will take place February through mid-April
 - b. Focus on facility items – EH&S will not be making appointments with the PI or LSRs to go over written records (IIPP binder, chemical hygiene plan and training records). We will be focusing on facilities issues such as chemicals, seismic, egress, electrical and other aspects of lab safety. PIs and lab managers are encouraged to participate, but it is not required. Labs will be notified of the time period evaluations will be conducted and lab personnel can specify times they will be available for this process if they wish to meet with EH&S personnel.
 - c. Plan for EMS Building Walk EH&S personnel will be performing a walk through of EMS to focus on waste and egress issues beginning 2/6 for about 2 weeks. No appointments are being made during this process. Personnel will be going through all spaces in EMS and summary reports will be sent to the labs.
3. Lesson Learned / Lab Incidents
 - a. MCD hot water bath – Eva Robinson spoke about a recent incident in the Boeger lab. A Kimax glass bottle of SSC buffer +1% SDS had been left overnight in a covered 65^o water bath. The researcher discovered all of the water evaporated from the bath and when he replenished with cool tap water, the hot glass bottle exploded with great force. Lab personnel were able to discern that the substance was a potential minor skin irritant at that concentration. The researcher washed the solution off and removed his contaminated lab coat. Personnel unplugged the water bath and let it cool to room temp before attempting to remove the other bottle. Everyone was evacuated from the lab to assess the situation and determine how to approach the clean up. The affected person had been wearing glasses and a lab coat. His eyes were protected and the liquid was not hot enough to burn him, but he was covered with glass particles and solution. He went home to change after the lab participated in a basic clean up of the solution and glass. They took these steps to prevent further incidents of this type: 1) reported the incident to EH&S/ PBSci facilities, 2) had Michael Mason, MCD Equipment Technician, check that the unit was functioning properly, 3) adjusted their SOP (standard operating procedure) to ensure frequent checks on the water level in the bath, 4) looked into purchasing Pyrex labware which is more heat/cold resistant than Kimax, 5) wear appropriate PPE at all times. EH&S suggests that every lab check all equipment that heats or cools on a regular basis to prevent incidents where the controls may not be working effectively.
Report all exposures, explosions, incidents and spills to PBSci Facilities and EH&S so that they might assist in incident evaluation and discuss measures to prevent a similar occurrence in the future.
 - b. Centrifuge / rotor safety (Jim Schoonover / Mike Mason) – Two rotor incidents have occurred recently where centrifuge tubes rated for a that rotor and speed collapsed, causing loss of sample and a fair amount of effort on the part of Michael Mason to remove the tubes. Either of these incidents could have caused irreparable damage to the ~\$15,000 rotor. Both incidents involved polycarbonate 26 ml Ti-70 tubes filled about ½ full. To prevent this happening to you; 1) check the tubes prior to use for stress fractures or other indications of age, wear and tear. Centrifuge tubes/ bottles are meant to be disposable and have a limited life span. 2) read the owners manuals for your particular tubes. The information available on line is not as reliable as in the printed manual. When in doubt, contact the manufacturer for explicit instructions.
An almost new -80 freezer owned by a MCDB researcher recently failed. The built in temperature sensor read -90^o and the freezer was cold inside so the researchers were not alarmed at the extra cold situation. The internal sensor had failed and was not reading the correct temperature which resulted in the freezer going up to room temperature. Michael Mason suggests that you set both the low and high points and add an external display alarm (available from HVAC) to provide redundancy on your freezers.
 - c. UCLA pyrophoric material (Jim Schoonover) - A young UCLA researcher who was a relatively new member of her lab was working alone during the shut down over the holidays this year. A detailed report has not been provided although some preliminary information has been released. Information below is what has been communicated to date. She was trying to transfer a pyrophoric material via a 60 cc syringe through the septum of a 250 ml bottle. The integrity of the syringe was compromised and the pyrophoric material ignited upon contact with air - setting the researcher's synthetic sweater and gloves on fire. She was not wearing a lab coat or goggles and ran away from the shower located ~ 6 feet from her. Researchers in a nearby lab were able to catch her and put the fire out

with a lab coat, but she received severe burns over 40% of her body. She died just over 2 weeks after the event. This incident is under investigation of Cal/OSHA. They are looking at training records, accident reports, UCLA's IIPP (Injury, Illness, Prevention Program), and the lab/ UCLA Chemical Hygiene Plans. This situation might have been avoided if certain steps had been taken. What can we do to prevent an incident here at UCSC?

- 1) Review High hazard protocols for our labs
- 2) Include EH&S in protocol review and development
- 3) Develop written SOPs for PHM (Particularly Hazardous Material)
- 4) Require training and document it faithfully
- 5) Provide direct oversight and mentoring of high hazard operations by trained and qualified research staff
- 6) Always use correct PPE (Personal Protective Equipment)
- 7) Do not work with high hazard materials alone
- 8) Ask "What if?" What is the worst that can happen?

On going follow up and meetings with the Chemistry Safety Committee are planned as well as specific users of pyrophoric materials.

4. Haz Waste issues (April Casper)
 - a. Cost of waste, ways to save \$\$\$\$ - the process of disposing of hazardous waste has changed and the cost of disposing of hazardous waste has gone from between \$0.46 - \$0.72 / lb to \$2.80/lb as of 1/2008. This cost has been transparent to the researchers because the division pays the fees. They will still be paying the disposal fees, but be aware that this high increase will result in fewer funds for the rest of divisional programs. In an effort to dispose of waste most efficiently using the new processes, try to use the smallest bottle / bottles needed to dispose of your waste. Follow guidance provided by April in her Waste Minimization handout via OTP soon.
 - b. OTP changes, ways to get through transition – OTP platform will change as of 1/30/2009. Please contact April if you have problems or find glitches so they can be fixed ASAP.
 - c. Sharps container labels – New sharps labels are available for sharps that are not contaminated with chemicals, radiation or biologicals. Contact April Casper at 459-3086 or aprilc@ucsc.edu to request non-contaminated sharps stickers.
5. Chemical Inventory update, plan for user group meeting (Vern Ares) – EH&S previously maintained a chemical inventory database for the campus. Last year all the data was transferred to a web-based inventory system – ChemTracker and all updated information is being entered to this database. If you wish to find a chemical, please contact Vern or the main desk 459-2553. EH&S students are continuing to gather lab inventory, so we can delete items no longer on campus and add the new ones. Meanwhile, each lab has the capability to update their own inventory once they are trained in ChemTracker. Contact Vern at 459-5167 or vreres@ucsc.edu to get the particulars of training.
6. Animal Care & Use Occupational Health Program process (Brent Cooley) – if you are working with animals, please log on to the EH&S web site and read about the new mandatory occupational health program for all personnel working with animals. http://ehs.ucsc.edu/lab_research_safety/animal_research.php