

March 7, 2013

TO: All Laboratory Personnel

FROM: John Park, Laboratory Safety Committee

SUBJECT: March 4, 2013 Safety Committee Meeting Minutes

Participants: Edith Henderson, Magdi Ibrahim, Joe Jurgevich, Heather Morgan, Max Overman, John Park, Mark Starr

Solvent Waste Storage and Disposal:

John and Max reviewed some minor changes that have been implemented for storage and disposal of solvent waste in the lab:

- **Storage:** for the Semi-Volatiles/Pesticides extraction room, the 4-L glass bottle for ether waste is now being permanently stored in the solvent storage room (G102). This allows the ether waste to be stored in an area with good ventilation and away from work areas. For the 4-L glass bottles used for mixed solvent waste (methylene chloride, hexane, acetone), bottles that are full will be transferred to the solvent storage room on a weekly basis. The bottles will be stored there until transfer of the waste to the waste drums. This should help to reduce solvent fume build-up in the flammables cabinets in extractions, which are not vented and therefore can trap odors/fumes until the cabinet door is opened.
- **Disposal:** after transfer of solvent waste to the waste drums, all 4-L bottles will be kept in the storage room overnight. This will allow for any solvent residual on the bottles to dissipate in a well-ventilated room, prior to the waste bottles being returned to the extractions room or Wet Chemistry.

Mark commented on the extra caution that should be used with regard to storage and use of ether, due to potential of formation of peroxide crystals around a bottle opening. These crystals present a danger of explosion. However, in the lab we have now had all of the old bottles of ether removed for disposal, leaving only the bottles currently in use by the extractions group. In addition, ether waste is regularly transferred to the solvent waste drums, and the 4-L glass bottle for ether waste is replaced periodically.

Tier II / EPCRA:

Max reported that the Tier II / EPCRA reporting for chemicals at the lab during 2012 has been completed, and was entered electronically by Steve Kaasa on February 27th. Only two chemicals exceeded the threshold limits: argon and methylene chloride.

For argon, both the federal threshold limit of 10,000 pounds and the Wake County threshold of 55 gallons was exceeded in 2012; however, a smaller storage tank was installed in July 2012, so in the future the lab will only exceed the Wake County threshold for argon.

County threshold of 55 gallons was exceeded, with the majority storage room.

New Safety Consultant for DWQ:

Chris Cangemi is the new Division Safety Consultant, taking the position vacated when Steve Kaasa became the Department Safety Director. Steve gave Chris a short tour of the lab on February 27th, so some of you may have had the chance to meet him already. Chris will be coming back to the lab in the near future for a more in-depth tour. Chris is located in the Archdale Building and can be contacted at telephone number (919) 807- 6323.

Safety Inspection:

John and Max conducted a safety audit of the laboratory building on January 29, 2013. There were only two discrepancies found during the audit:

- Broken Glass Box: One broken glass box had some glass pipets sticking out from the box opening, which posed a puncture hazard. The pipets had gotten caught up on other broken glassware – recommended a separate box be used for the glass pipets.
- Chemical Storage: One storage cabinet had oxidizers next to a strong reducer. The reducer was moved to a separate cabinet. In future inspections, we will make checking chemical storage a priority, so as to assist in determining when changes to storage are needed. Overall, chemical storage in the lab is in good shape, so this is just a matter of providing a periodic check.

Fume hoods:

Kent has been trying to have issues with fume hood controls resolved. The problem is that for a few fume hoods, the alarm will sound (or the alarm light will flash) even when air flow is acceptable. The problem appears to be with the control box and/or Phoenix valve, not air flow.

The older Hamilton fume hoods in Wet Chemistry and Extractions will be re-certified in the coming months. The air flow testing would be conducted by ECT and is intended to certify higher hood sash positions, as well as certify use of the sash door glass panels.

Emergency Contact Information:

Edith mentioned that the emergency contact information sheets posted on the hallway doors for Semi-Volatiles and Pesticides needed to be updated. The sheets were updated and posted on March 4.

NOTE: The monthly safety committee meeting for February 2013 was cancelled.

A reminder to safety committee members: checks of the safety devices for each lab unit should be conducted and documented on a monthly basis. This includes eyewashes and drench hoses, safety showers, fire extinguishers, and smoke detectors. For fume hoods, please check each hood every three months with the velometer (located in John's office).

The next safety committee meeting is scheduled for April 8, 2013 at 10:30 a.m. Minutes were prepared by Max Overman and John Park on March 6, 2013. MO/JP