MINUTES
LABORATORY AND CHEMICAL SAFETY COMMITTEE

Wednesday, March 15, 2017 (2005 Michael Hooker Research Center)

Members Present: Lorraine Alexander, Catherine Brennan, Pat Boone, Kimberlie Burns, Mary Beth Koza, Stephanie Murray, Todd O'Buckley, Jim Potts

Members Absent: Nita Eskew, Anthony Hackney, Rihe Liu, Kathryn Reissner

Guest(s): Alex Miller (Chemistry), Steve Parker (EHS)

Meeting commenced at 3:00 pm.

Hazardous Waste 2016 Statistics

Steve Parker, Hazardous Materials Manager for EHS, gave a summary of the waste statistics for 2016. There were a total of 8562 online forms filled out for chemical waste pickups and 108,000 kg of waste shipped from the University's Treatment, Storage and Disposal Facility (TSDF). In addition, there were 51 direct shipments from campus labs at an overall weight of 34,168 kg. EHS is working on reducing number of direct shipments based on higher cost than being routed through TSDF. For radioactive waste there were 629 waste pickups which is continuing to trend downward. For biological shipments there were 2000 boxes of medical waste shipped which is only a small percentage since a majority of biological waste generated on campus is treated on site via sterilization by autoclave. Parker also mentioned that EHS diverts a large amount of waste by recycling, including recycling of fluorescent bulbs, non-halogenated solvents, non-PCB ballasts, lead, lead acid batteries, used oil and steel solvent cans. Several committee members commented that we should inform more labs about segregating solvent waste into halogenated and non-halogenated so that more non-halogenated solvents can be recycled.

New Hazardous Waste Generator Rule

Brennan presented an update on the EPA Hazardous Waste Generator Rules that were revised in November of 2016. The effective date of the rules is May 30, 2017 but North Carolina is requesting a delay on implementation until March 1, 2018. The rules have several changes that will affect UNC including how to make the hazardous waste determination and container labeling required to have hazard data. Many manuals and training programs will need to be updated and personnel trained prior to next year. EHS will continue to update the committee on the path moving forward as year progresses.

Safe Operating Cards

Principal Investigator Alex Miller showcased a safety procedure he has implemented within his research lab related to Safe Operating Cards (SOCs). The Miller lab performs synthetic organomettalic chemistry and catalysis within the Department of Chemistry. The cards are reusable signs used to show hazard data for unattended reaction. SOCs also help researchers do an initial hazard assessment of each reaction and increase communication and awareness of reactions and processes occurring in the lab among lab members. Miller based the SOCs on similar cards that the University of Minnesota developed in partnership with Dow Chemical. Committee members were very impressed with this innovative idea and had suggestions regarding adding even more information for emergency responders who might not understand chemical structures and formulas. A suggestion was made for Dr. Miller and his group to present a poster or talk regarding SOCs at the next American Chemical Society meeting within the Division of Chemical Health and Safety.

Injuries and Incidents

The Committee reviewed the log of injuries and incidents from January through February, 2017.

INJURY TYPE	INJURY
ABSORPTION, INGESTION OR INHALATION	Four employees were potentially exposed when they received pathogenic biological samples.
ANIMAL BITE	An employee was bitten by a mouse while attempting to retrieve a blood sample.
ANIMAL BITE	An employee was bitten by a rat during animal handling techniques class.
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BURN OR SCALD, HEAT OR COLD:	Visiting Scholar touched forehead with contaminated glove

CHEMICALS	(thiocyanuric acid) which caused chemical burn to skin. Employee reported to UEOHC for care.
BURN OR SCALD, HEAT OR COLD: CHEMICALS	Employee was performing a Heparin perfusion on a mouse and mixture splashed on employees face.
BURN OR SCALD, HEAT OR COLD: CHEMICALS	Employee was working with potassium metal when a flash fire occurred. The employee was wearing nitrile gloves, safety glasses but no lab coat and the left hand was burned as a result.
CUT, PUNCTURE, SCRAPE	An employee was preparing a plastic PCR gel mold and using a box cutter. The box cutter broke causing the blade to go into left index finger.
CUT, PUNCTURE, SCRAPE	An employee cut their finger on a tape dispenser during normal cleanup procedure.
STRAIN: REPETITIVE MOTION	An employee developed pain when keyboarding.
STRUCK OR INJURED BY	An employee was prying animal tissue out of media with forceps, when the forceps caused puncture wound through glove.

For incidents, there were 2 fire alarms, 1 fire, 2 natural gas leaks, 1 miscellaneous, 9 odor complaints, and 1 radiological spill.

Other Committee Business
Koza highlighted the new Safe Science - Culture of Safety webpage on the EHS website. The new page includes Resources, Lessons Learned, Tools and Reporting Concerns. Koza encouraged everyone to review and make further suggestions for items to be included and also to share with colleagues.

Meeting adjourned at 4:10 pm.