Annual Laboratory Safety Procedures

Revised March 5, 2018

General Comments

This document covers instructions on how to take care of lab safety items that need to be completed once a year. The activities outlined in this document rely heavily on chematix chemical management system https://ucalgary.chematix.com/Chematix/

Processes Covered by Document

1. Hazardous Waste Disposal.
2. Reconciling Chemical Inventory.
3. Hazard Assessment Control Form (HACF) Review.
4. Laboratory Self Inspections.

Hazardous Waste Disposal

Requirements

- ☐ Store liquid waste stored in 1000 mL Polypropylene bottle (ie VWR PT# 414004 – 183).
- ☐ Liquid waste marked with contents and activity if radioactive.
  - For radium experiment bottles should be labeled with "5.476 Bq/mL ^{226}Radium Salt".
- ☐ Solid waste stored in zip-lock bags.
- ☐ Solid waste containers labeled with contents including any contaminants.
  - For radium experiment bags this would be "Debris Contaminated with ^{226}Radium Salt".

Procedure

1. Enter Chematix.
2. Click on "Waste" under the main header
3. Click on "Create Waste Pickup Worksheet"
4. Select location for pickup from drop down menu.
5. Add instructions in comment box indicating how HAZMAT can gain access to room for pickup.

6. Create chemical waste card(s).
   (a) Click on "Add more waste"
   (b) Select "Contaminated Materials Waste Card"
   (c) Indicate location on drop down menu
   (d) Check "Radioactive" under "Contamination Type"
   (e) Report quantity, size, and contaminate of containers. Containers with identical contaminates can be entered on the same waste card.
   (f) Print and sign waste card and leave it with disposal. HAZMAT will need this.
7. Once all waste cards are added click "Submit Waste for Pickup"

Reconciling Chemical Inventory

Requirements

- □ Every chemical has a bar code, or is on the undeclared list.
- □ Every chemical's amount remaining is up to date.
- □ Every chemical is in it's designated storage unit.
- □ Every storage unit has a bar code.
- □ Every chemical that is not needed is disposed of.
- □ All chemical waste has been removed by HAZMAT.
- □ Chemical inventory has been reconciled through Chematix.

Procedure

1. Enter Chematix.
2. Update amounts remaining of all chemical.
   (a) Click "Inventory" under main header.
   (b) Click "Manage My Inventory" under "Manage Lab Inventory"
   (c) Click on "Toggle" button to select all labs, and click "Search Active Lab Inventory"
   (d) Click on "Barcode" of each line item and confirm that the "Content Size" is accurate.
   (e) Adjust "Content Size"
      i. From main inventory page click "Adjust Container Quantity" under "Add Items to Inventory"
      ii. Search barcode of container to adjust
      iii. Enter amount removed from original content size into the box labeled "Removed Content Size/Units
      iv. Select the correct units and "Commit Modification"
3. Obtain a bar code scatter from PHAS main office
4. Follow scanner guide for scanning chemicals. Remember to scan storage container and then individual containers.

HACF Review

Requirements

- ☐ Review Hazard Assessment Control Form
  - ☐ Staff HACF
  - ☐ Standard TA HACF
  - ☐ Advanced TA HACF
- ☐ Update HACFs in Safety Binders
- ☐ Submit updated HACFs to EH&S

Laboratory Self Inspection

Requirements

- ☐ Lab Inspections for 09, 17, 29, 39, 48/50 entered in chematix
- ☐ Administrative inspections for ST 25, 26, 30, 32, 34, 36, 37, 38, 42, 68