The City College of New York

Good Laboratory Practices-Compliance Monitoring Program

Scope of the Audit

- The City College of New York is subject to audits by various agencies and set requirements. Audits are multimedia along with The Resource Conservation and Recovery Act (RCRA) environmental safety programs :
  - CUNY Central
  - EPA
  - NYSDEC
  - NYCDEP
  - NYCDOH
  - CCNY EHOS

EPA

- Provides the overall audit
- Multimedia audit where other violations will be referred to appropriate agencies

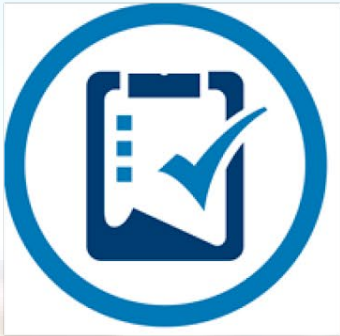
- Violations will be met with monetary penalty
  - **According to RCRA §7003(a)-** may be fined not more than $7,500 for each day in which said violation occurs or such failure to comply continues.

Reduce non-compliant Items

Avoid non-compliant issues during Audits

1. Good lab practices
2. Adhering to the corrective actions found during EHOS inspections

EHOS Safety Stratus Inspections



Inspections
Allow for periodic assessments to identify hazards and reduce risk

Corrective Actions
Are requirments and recommendations for mitigation of harmful conditions and practices.

Compliance
CUNY Polices,
City, State and Federal Regulations

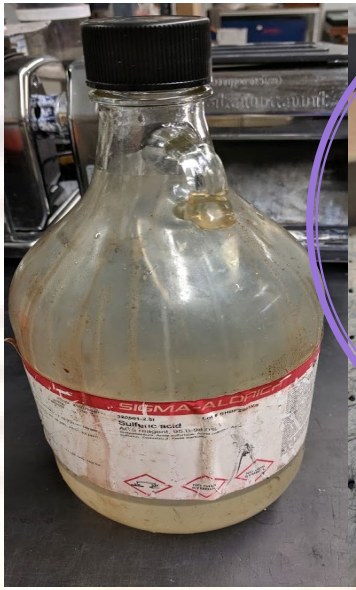
Inspections Findings

Some of the common citation during EHOS inspections and CUNY Audits fall under the following categories:

- Safe laboratory practices
- Hazardous waste storage and disposal

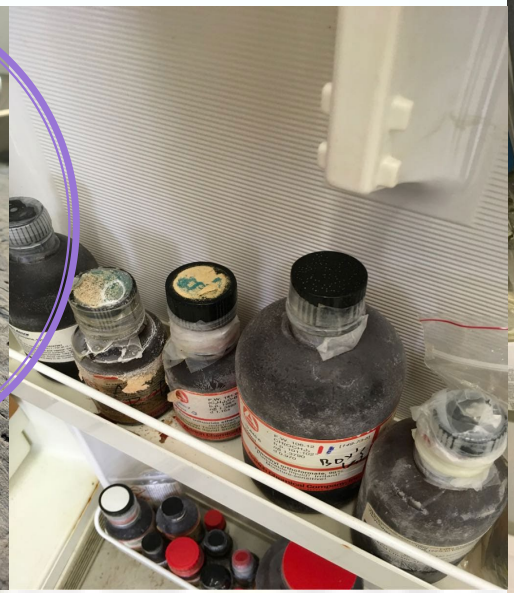
Chemical storage-Adequate containers

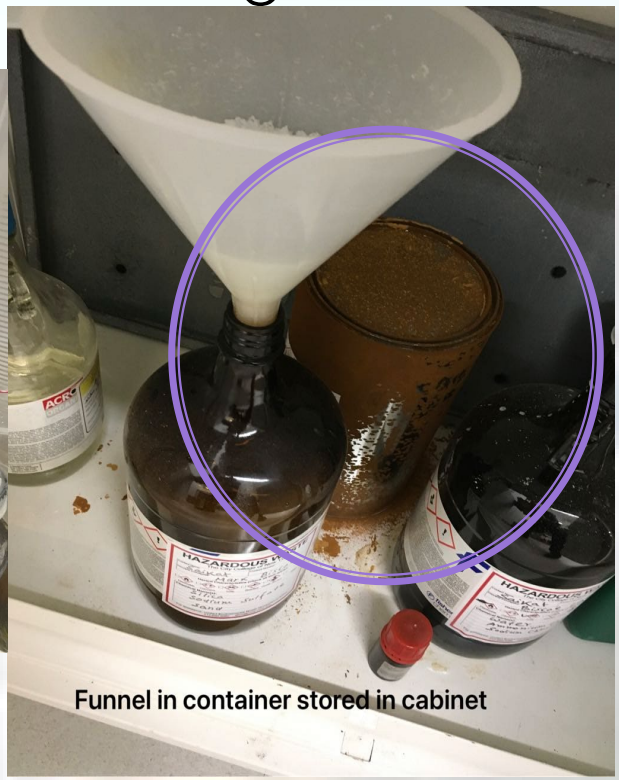
- Compromised containers- Compatible container Chemical containers must be in good condition (free of corrosion, Crystallization and with legible labels)



Labels not legible

Container damaged

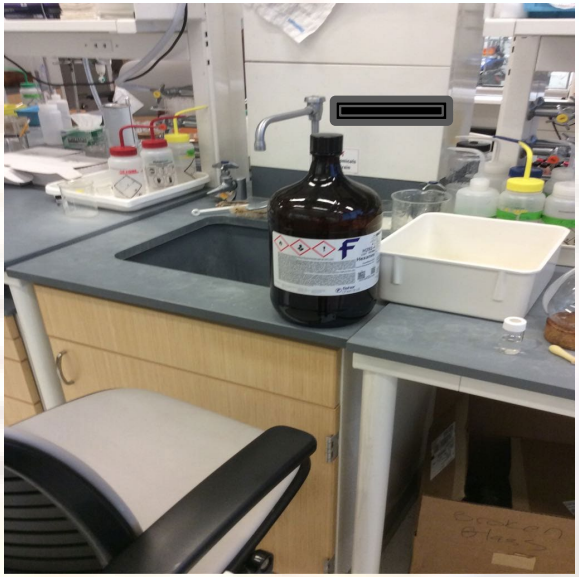




Funnel in container stored in cabinet

Chemical Storage

- Store all chemicals in a manner that minimizes the risk of fire, explosion, or release.



- Chemical by the sink

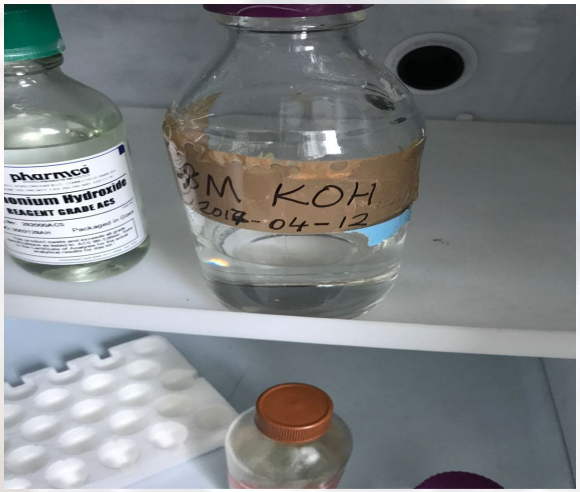
- Leaking Container

Chemical labeling

- Labeling- The contents of the container must be spelled out, with no abbreviations, chemical or structural formula. Labels must be legible.

Labels not legible

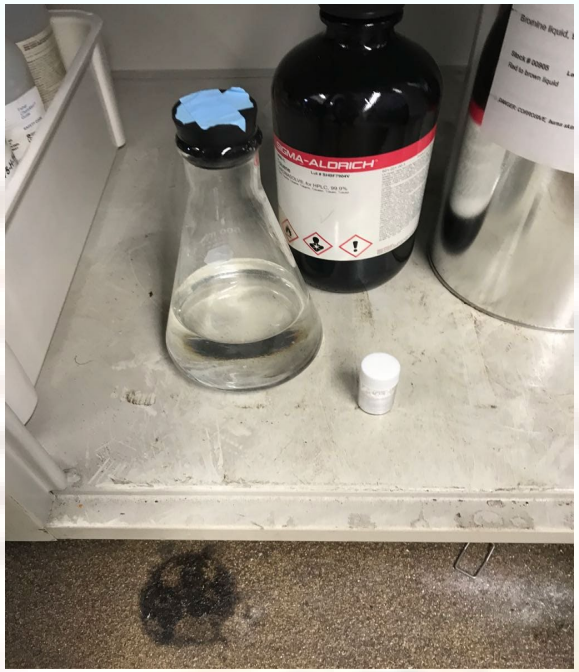
- No Chemical Formula
- No Faded Label

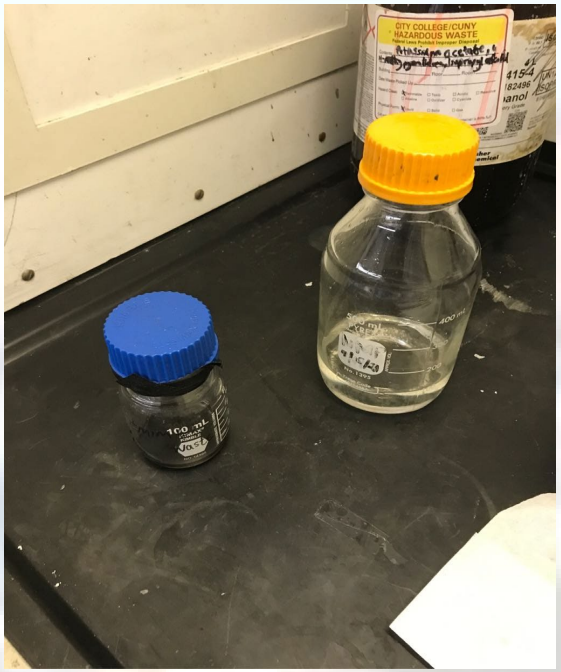


Chemical formula not acceptable

Common Citations-No labels

- Unlabeled containers

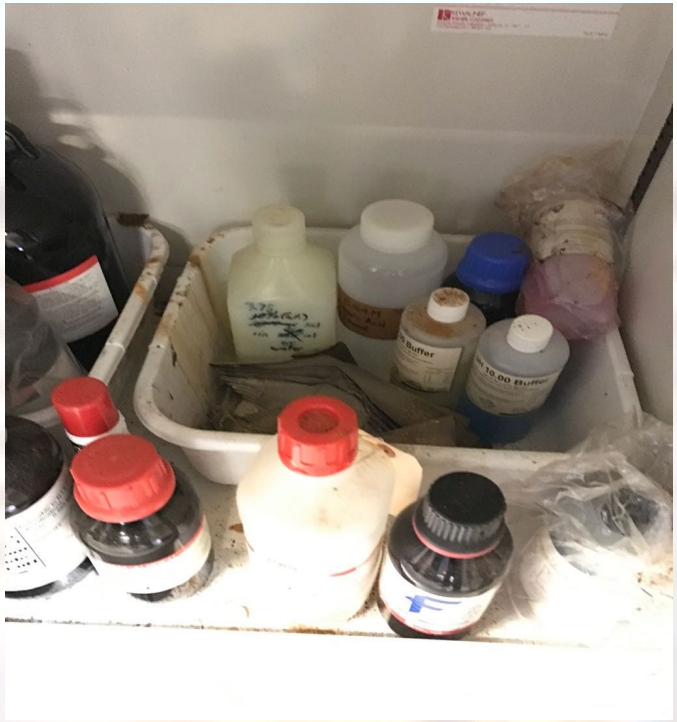




Proper GHS label

Common Citations

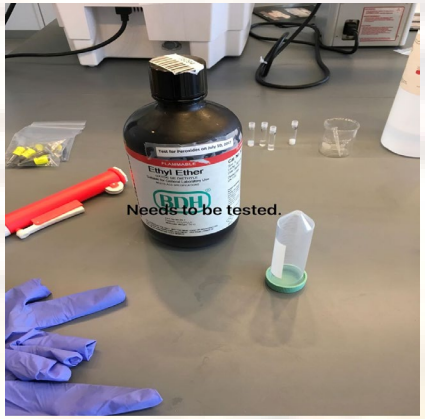
- Incompatible chemical storage

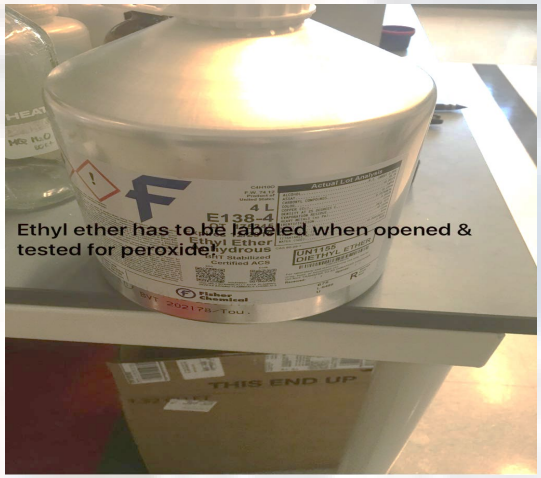


Fine upto $7500 per instance per day

Peroxide forming Chemicals

- Store peroxide formers in a cool, dry, and dark location- usually a flammables cabinet. Only store peroxide formers in an explosion proof fridge/freezer if recommended by the manufacturer.
- **Unopened container**: discard or test for peroxide formation at 12 months from receiving or at manufacturer's expiration date whichever comes first.
- **Opened container**: test for peroxide formation quarterly.





Old Picric Acid bottle

Peroxide forming Chemicals classification

Class A: Severe Peroxide Hazard Chemicals that form explosive levels of peroxides without concentration. Severe peroxide hazard after prolonged storage even if unopened.
Ex. Isopropyl ether, Sodium amide etc.

Class B: Concentration Hazard Chemicals that can form explosive peroxides when concentrated by evaporation, distillation, etc.
Ex. Acetaldehyde, Diethyl ether, secondary alcohols etc.

Class C: Shock and Heat Sensitive Chemicals which violently auto-polymerize after internal peroxide accumulation.
Ex. Chlorotrifluoroethylene, vinyl acetate etc.

Common Citations

- Maintain adequate aisle space to allow the unobstructed movement and keep egress clear

Emergency egress blocked

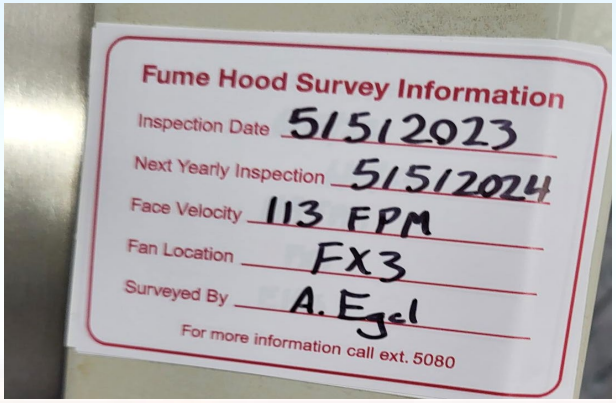
Good Practices

- Chemical segregated based on compatibility
- Chemical containers in good condition and closed
- Shelf Liner

Required (Good) Practice

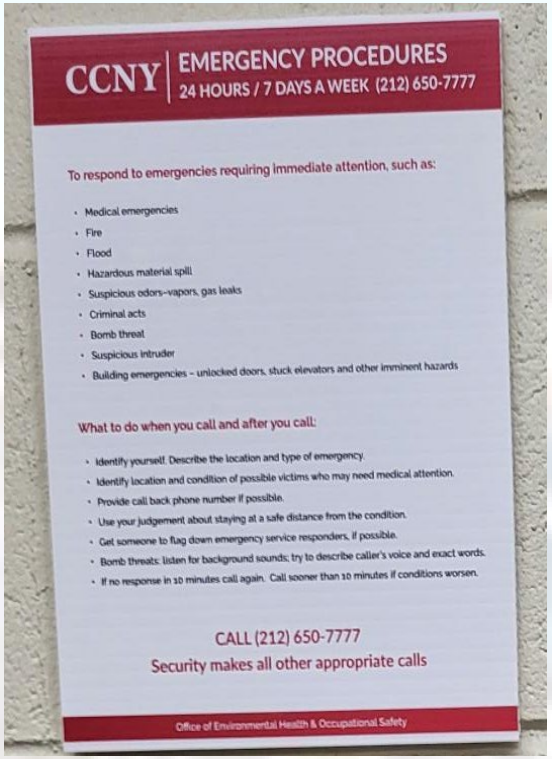
- Lab door signs

Required (Good) Practice –Proper Signage

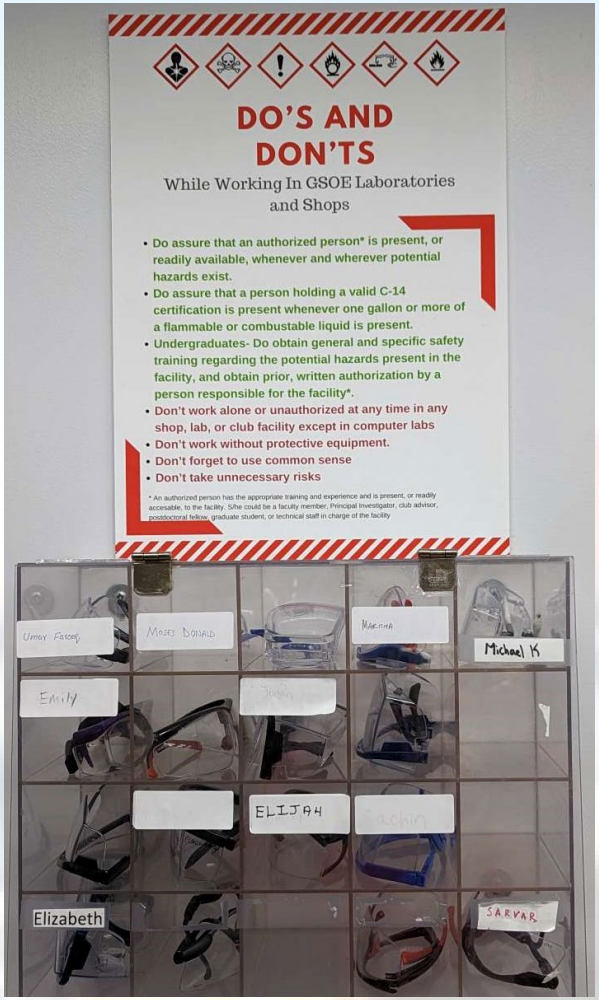


Fume hood inspected

Valid C-14

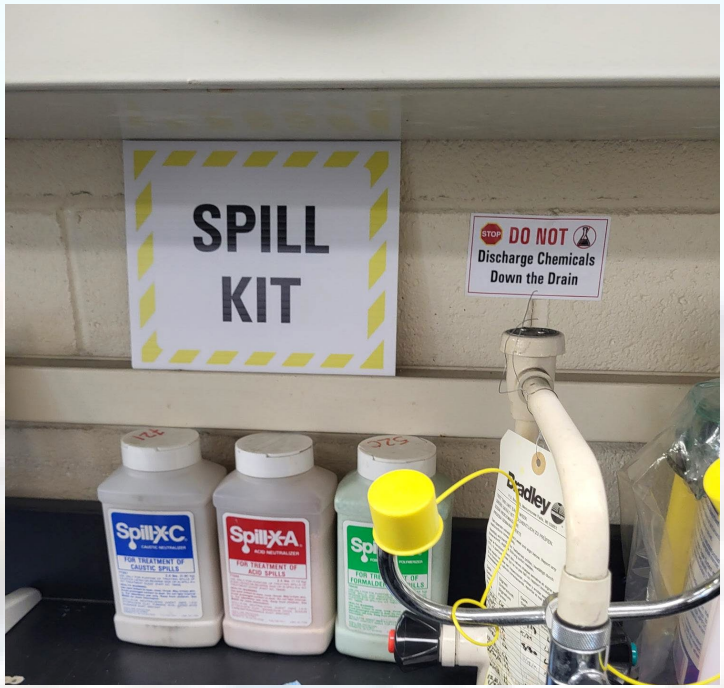


Emergency response procedure



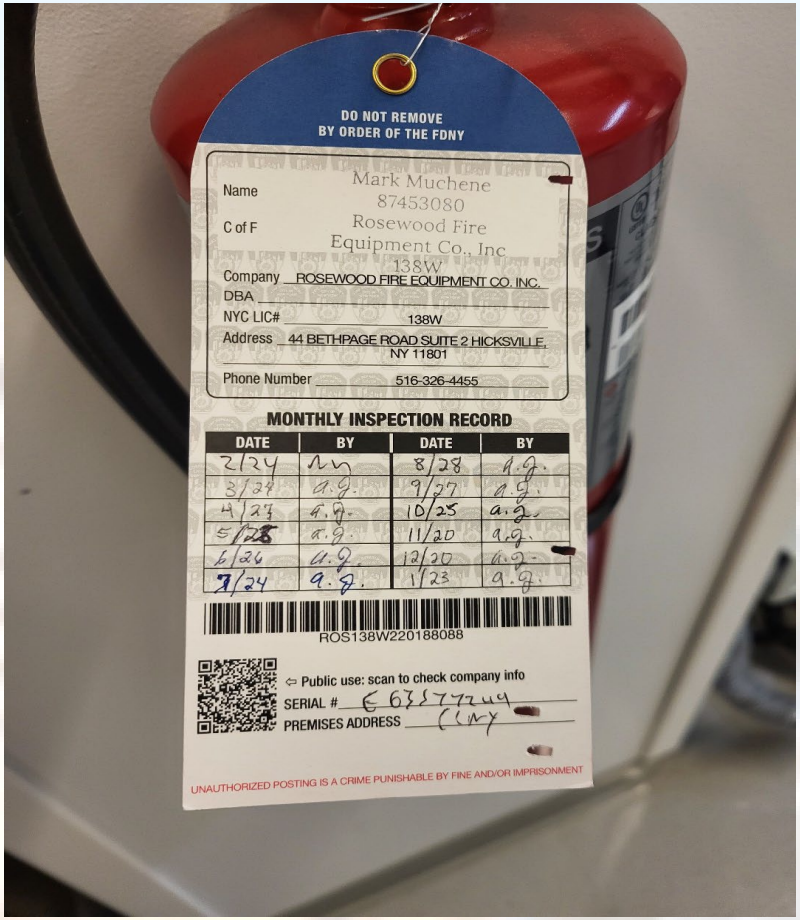
Good Practice

- Broken glass container, spill kit



Spill kit should not interfere with access to eyewash

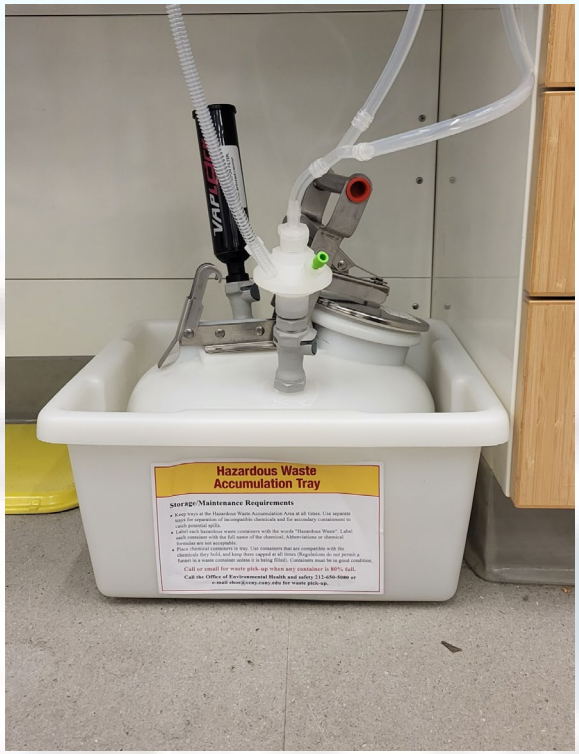
Good Practice



Good Practice

Gas Cylinders properly stored

Good Practice



Secondary container with proper label

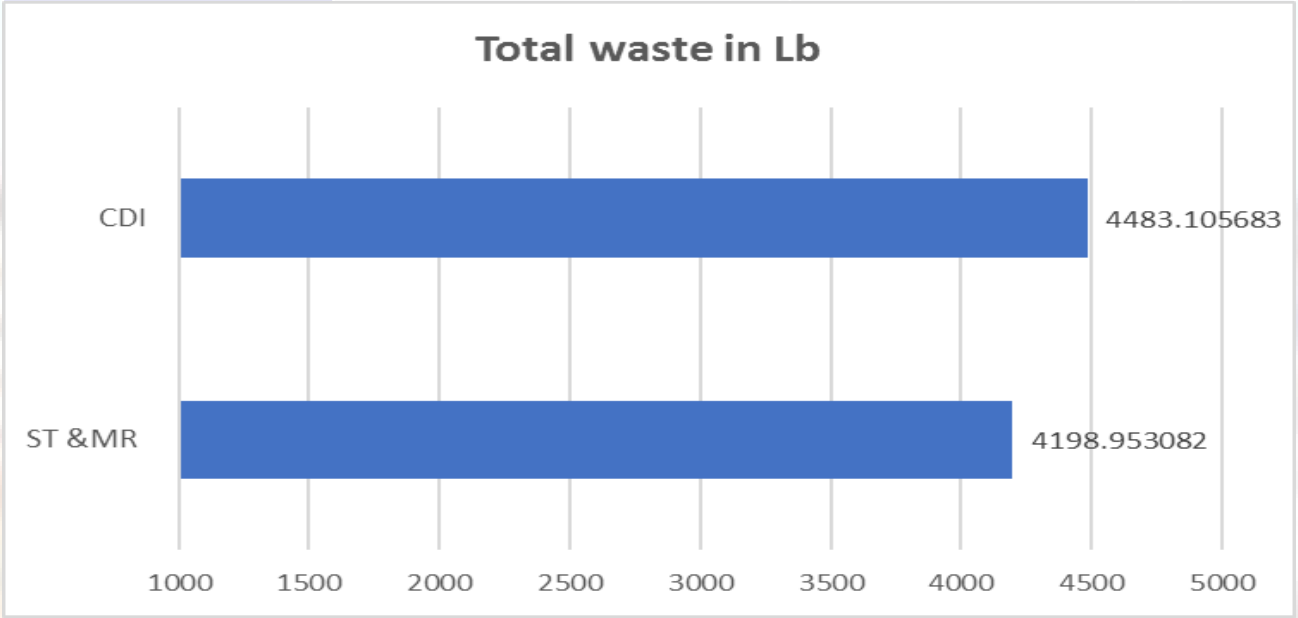
Good Practice

Good Practice

Hazardous waste generated by amount in 2023

	Marshak/Steinman	CDI
Total waste in Lb	4198.953082	4483.105683

Total hazardous waste generated by location in pounds (2023).



Waste generated include old and unused chemicals

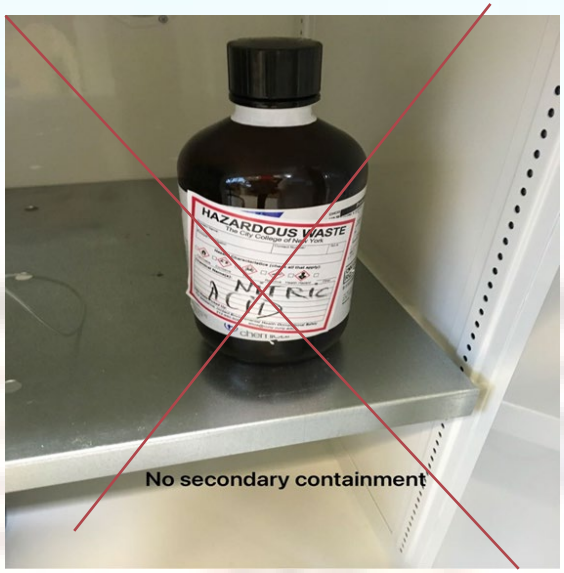
- Please limit purchase, costs 10x more to dispose

Hazardous waste generation

- Provide Satellite Accumulation Area (SAA) signage at the point of waste generation (laboratory rooms)

Hazardous waste accumulation

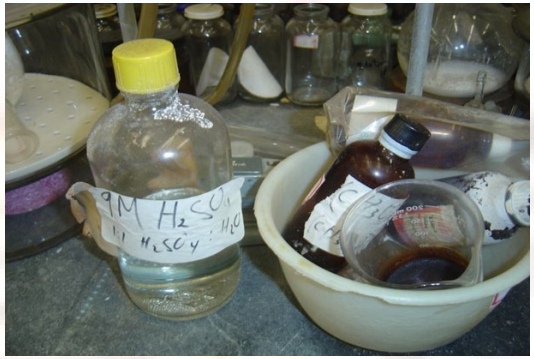
- Provide secondary containment for hazardous waste with proper label on the container and the secondary tray



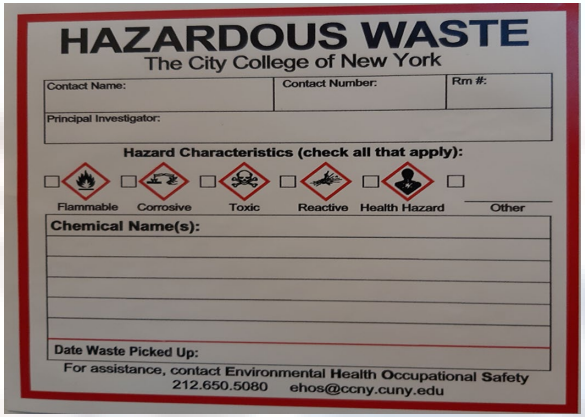
Acids or bases can react with the metal to form hydrogen gas or can corrode the shelf and weaken it.

Common Citations

- Improper hazardous waste label and storage



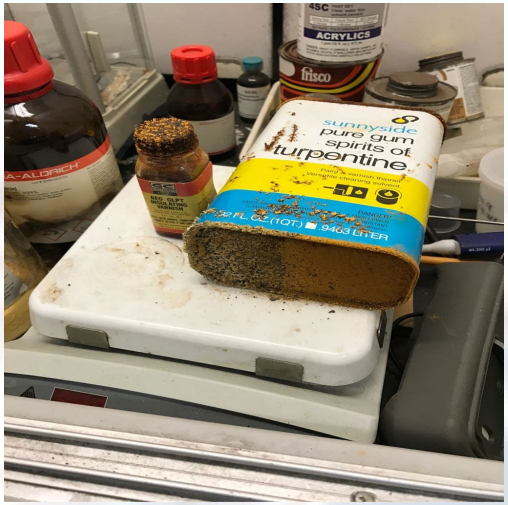
Improper label with chemical formula



Chemical storage in the floor, no label and secondary container

Common Citations-Major EPA problem

- Inherently Waste Like Containers

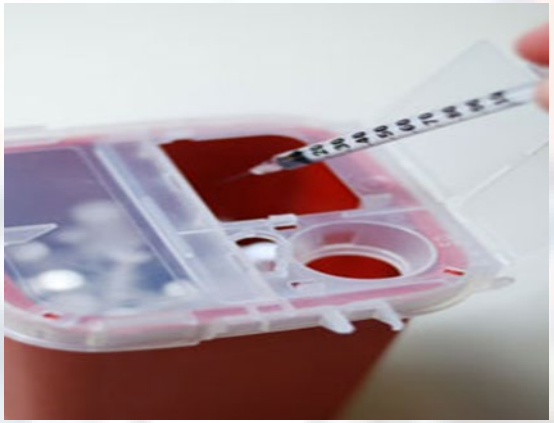


Hazardous waste management

- Hazardous waste is brought to the Main Accumulation Areas in Marshak (MR 7D) and CDI buildings by EHOS staff upon lab request. Lab personnel do not have access to the MAA areas.
- EHOS covers the cost for hazardous and biological waste disposal and there is no direct charge to the research labs.

Biological Waste

- Common examples:
  - ➢Medical waste containing known or suspected infectious substances.
  - ➢Sharps containing known or suspected infectious substances



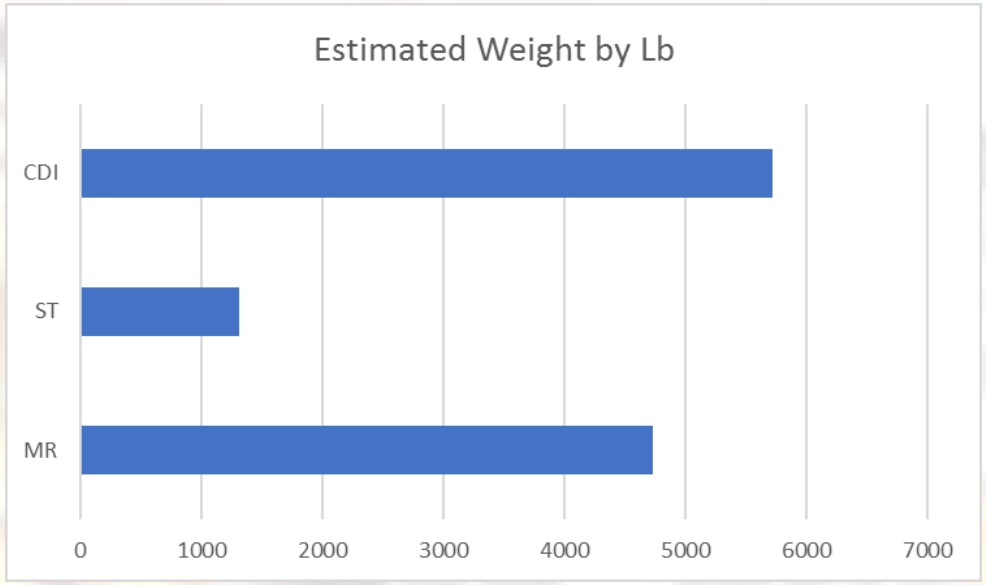
Biological Waste

What goes in the Red Biohazard Bags

- Animal tissues
- Any cells- specimen cultures, infectious agents
- Material contaminated with human and animal fluids
- Carcinogens and chemotherapeutic agents

Estimated weight of biowaste picked up by location in 2023.

	MR	ST	CDI
Estimated weight by Lb	4740	1320	5730



Training

Individuals working with hazardous material are required to complete the following trainings provided by the EHOS department:

- ❑ General OSHA Lab Safety
- ❑ RCRA Hazardous Waste Management (Annual refreshers required)
- ❑ FDNY Certificate of Fitness C-14: Fire Safety (Supervision of Non-Production Chemical Laboratories)
- ❑ Radiation Safety
- ❑ Laser Safety
- ❑ Facilities Right-to-Know training
- ❑ Biosafety- Bloodborne Pathogen

*Individuals are not permitted to work in the lab without the mandatory trainings (OSHA lab safety and RCRA)

Best Management Practices

- Maintain your lab as though an inspector could walk in at any moment
- NO FOOD OR DRINKS!!!
- Have proper labels posted
- Warning signs posted and legible
- Chemicals & chemical waste properly segregated
- PPE readily available
- Inspection logs up-to-date
- Always treat health & safety as a priority
- No unauthorized people in the lab at any time
- Report suspicious behavior immediately
- Keep emergency exits and the path to them clear
- Do not pour any chemicals down the drains
- No Storage in corridors or stairwells
- Be vigilant! Enforce laboratory rules & regulations

Emergency Contact Information

CCNY Dept. of Public Safety: 212-650-7777 or (212) 650-6911

Environmental Health & Safety Office: 212-650-5080

EHOS Email: *EHOS@ccny.cuny.edu*

Fire, Police, Ambulance – 911

Physical Plant Services (PPS) 212-650-8675.

THANK YOU

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