Fundamentals of Productive Lab Inspections in Academia

Executive Summary

- Inspections protect health and safety of lab workers and students by identifying unsafe work practices and hazardous work conditions.

- Formal housekeeping and chemical hygiene inspections should be held at least quarterly for units which have frequent personnel changes and semiannually for others; informal inspections should be continual.

- Lab inspection checklists should include:
  - lab housekeeping and personal protective equipment (PPE),
  - chemical storage and chemical waste,
  - signs and labels,
  - safety documents,
  - lab chemical hoods,
  - gas cylinder storage,
  - emergency safety equipment, and
  - physical plant concerns and security issues.

- We do a lot of these things already, some additive notes about things we don’t necessarily always check:
  - check for good tubing connections to avoid flooding
  - personal protective equipment: visitors and lab inspectors should wear appropriate PPE when they enter labs
  - chemical storage and waste: move any items that block your access and be sure to inspect all storage areas in the lab, chemicals need to be dated, label secondary containers, do not store chemicals above five feet for safety, chemical inventory should be up to date, refrigerators and freezers should be cleaned and defrosted on a regular basis

- Lasers, high voltage equipment, fire alarms, emergency telephones, safety showers, fire blankets, fire extinguishers, and safety eyewashes should be clearly marked with highly visible signs

- Lab hoods: workers should keep their heads and bodies outside of the hood and listen for changes in airflow

- Security issues: if the door closer is malfunctioning, employees are unaware that there is a potential security problem.

- When reviewing a report with inspector: be sure to include photographs of problem areas in your report, be sure to give the inspector enough time to review and have a conversation with instructors.

Reference: