# Regular Self Inspection

**background**

Health, Safety & Environment visits each lab on a regular basis to assist in making each space as safe as possible. Other inspections in the laboratory should be done more frequently. Use the following check lists for self-inspections. Rectify any deficiencies and record the results in the inspection log(s) in Appendix A. Please add and/or remove sections of the inspection checklists to best suit your lab.

* [Weekly Inspection Checklist](#_weekly_inspection_checklist)
* [Monthly Inspection Checklist](#_Monthly_inspection_checklist)
* [Quarterly Inspection Checklist](#_Quarterly_Inspection_Checklist)
* [Annual Inspection Checklist](#_annual_Inspection_Checklist)
* [DIY (Do It Yourself) Inspection Checklist](#_Inspection_Checklist)

**Daily inspections**

* Each day, lab users should inspect their own space to identify and correct hazardous conditions or report them to their supervisor
  + Are there any visible spills, odours or obstructions in the lab?
  + Is the equipment functioning as designed?

**Weekly inspections**

* Laboratory apparel is appropriate (long pants, fully enclosed shoes, hair tied back, buttoned-up lab coat)
* Check to ensure that PPE and safety equipment is available, clean and in good repair
  + Is PPE being used?
  + Do gloves need to be ordered?
  + Turn on eye wash station and flush for 20 minutes. Check that flow is sufficient and regular
* Good Housekeeping:
  + Food, drink and related containers are absent
  + Aisles and exits are clear and the floor is free from tripping hazards or debris
  + Floors are clean
  + Lighting is adequate and functioning
  + There are no octopus plugs in use
  + Check for extended use of extension cords; they should only be used for temporary power
  + Check for adequate ventilation around electrical equipment
* Fume hoods are functioning and uncluttered
  + Fume hoods are not used for storage
  + Sash height is at or below marked height
* Biosafety cabinet has been cleaned with effective decontaminate
* Container size of flammables in the lab must be less than 25 litres (outside of the flammable storage cabinets)
  + Are all flammable storage containers smaller than 5 L[[1]](#footnote-1)?
  + Refrigerated flammables are in a marked flammable storage refrigerator
* Are all gas cylinders securely fastened?
* Chemicals and wastes are properly segregated according to the WHMIS hazard class and clearly labeled

**Monthly inspections**

* Ensure that any new staff have been properly orientated to the lab and have a training record in the lab safety book.
* Check for leaky faucets.
* Check equipment for frayed cords or short circuits. Unplug unnecessary equipment.
* Check autoclave log sheet to ensure that loads are being recorded correctly.
* All liquid chemicals are stored off the ground, but below shoulder height.
* Spill kit is available and stocked.
* Syringes and sharps are disposed of in sharps containers.

**Quarterly Inspections**

* Check picric acid containers to ensure that the minimum moisture content is maintained
* Check for peroxide formation in (see [Chemical Safety Manual](https://hse.ok.ubc.ca/safety/chemsafety/lab-safety-guidebook/)):
  + di-isopropyl ether
  + sodium amide
  + Vinylidene
  + potassium metal
  + Divinyl acetylene
* Autoclave has been checked by facilities in the last 3 months.

**Yearly Inspections**

* Check for peroxide formation in (see [Chemical Safety Manual](https://hse.ok.ubc.ca/safety/chemsafety/lab-safety-guidebook/)):
  + Dioxane
  + Diethyl ether
  + Tetrahydrofuran
  + Diglyme
  + Cyclohexane
  + Acryonitrile
  + Butadiene
  + Methyl methacrylate
  + Styrene
  + Tetralin
  + Vinyl chloride
  + Acrylic acid
* Ensure that all SDS sheets are less than 3 years old.
* Check fire extinguishers to ensure that they have been inspected within the last 12 months
* Ensure that Facilities Management has tested the drench shower in the last 12 months
* Ensure that the fume hoods or Biological Safety Cabinets have been certified in the last 12 months.
* Is there a record of an HSE inspection in the last 1-5 years?

# Appendix A – Inspection Checklists

## Weekly Inspection Checklist

|  |  |  |  |
| --- | --- | --- | --- |
| Weekly inspection checklist Date: \_\_\_\_\_\_\_\_\_\_\_\_ Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Item | Check | Deficiencies | Solution |
| **PPE** | | | |
| Is everyone wearing the appropriate PPE (at least – long pants, fully enclosed shoes, fully buttoned lab coat, hair tied back) | * Yes * No |  |  |
| Do gloves need to be ordered? | * Yes * No |  |  |
| Is PPE in good condition? | * Yes * No |  |  |
| **Safety Equipment** | | | |
| Is the emergency eyewash and shower unobstructed? | * Yes * No |  |  |
| Has the eyewash been flushed with water this week and checked for sufficient flow? | * Yes * No |  |  |
| **Fume Hood** | | | |
| Is the fume hood functioning? | * Yes * No |  |  |
| Is the fume hood uncluttered? | * Yes * No |  |  |
| Is the fume hood **not** used for storage? | * Yes * No |  |  |
| Is the sash height at or below the marked height? | * Yes * No |  |  |
| **Biosafety Cabinet** | | | |
| Is the BSC functioning? | * Yes * No |  |  |
| Is the BSC uncluttered? | * Yes * No |  |  |
| Is the BSC cleaned with effective decontaminant? | * Yes * No |  |  |
| **Chemical Storage** | | | |
| Are less than 25 L of flammables stored in the general lab space (outside of flammable cabinet?) | * Yes * No |  |  |
| Are flammable containers less than 5 L each? | * Yes * No |  |  |
| Are refrigerated flammables in a ULC approved flammable refrigerator (not regular fridge) | * Yes * No |  |  |
| Are chemicals and wastes properly segregated according to the chemical suitability guide? (See [Chemical Safety Manual](https://hse.ok.ubc.ca/safety/chemsafety/lab-safety-guidebook/) under Resources) | * Yes * No |  |  |
| Are oxidizers stored away from flammables? | * Yes * No |  |  |
| Are acids stored away from bases? (Secondary container is fine) | * Yes * No |  |  |
| Are carcinogens and toxics stored in a secondary container marked as such? | * Yes * No |  |  |
| Are ethers used and stored out of direct sunlight? | * Yes * No |  |  |
| Are all chemicals labelled appropriately (workplace label: full name in English, no abbreviations, reference to SDS, safe handling and hazard information) | * Yes * No |  |  |
| *Add or remove sections as needed for your lab* | * Yes * No |  |  |

## Monthly Inspection Checklist

|  |  |  |  |
| --- | --- | --- | --- |
| Monthly inspection checklist Date: \_\_\_\_\_\_\_\_\_\_\_\_ Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Item | Check | Deficiencies | Solution |
| **Orientation** | | | |
| Have new lab members been properly orientated to the lab and have a training record in the lab safety book? | * Yes * No |  |  |
| **Lab Equipment** | | | |
| Are there any frayed cords or short circuits associated with equipment? | * Yes * No |  |  |
| Is equipment that is not used frequently unplugged? | * Yes * No |  |  |
| Are extension cords used as a permanent connection to power? (Should only be used to provide temporary power) | * Yes * No |  |  |
| Are autoclave loads being recorded appropriately on the autoclave log sheet? | * Yes * No |  |  |
| **Chemicals** | | | |
| Are all liquid chemicals stored off the ground but below shoulder height? | * Yes * No |  |  |
| Has the eyewash been flushed with water this week and checked for sufficient flow? | * Yes * No |  |  |
| Is the spill kit available and fully stocked? | * Yes * No |  |  |
| **Wastes** | | | |
| Are wastes being submitted on a regular basis to prevent unnecessary accumulation of hazardous wastes? | * Yes * No |  |  |
| Are needles and sharps disposed of in official sharps containers? | * Yes * No |  |  |
| *Add or remove sections as needed for your lab* | * Yes * No |  |  |

## Quarterly Inspection Checklist

|  |  |  |  |
| --- | --- | --- | --- |
| quarterly inspection checklist Date: \_\_\_\_\_\_\_\_\_\_\_\_ Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Item | Check | Deficiencies | Solution |
| **Chemicals** | | | |
| Is the minimum moisture content maintained in picric acid containers? | * Yes * No |  |  |
| Have peroxide formers been regularly tested for peroxide formation (see [Chemical Safety Manual](https://hse.ok.ubc.ca/safety/chemsafety/lab-safety-guidebook/)) | * Yes * No |  |  |
| **Safety Equipment** | | | |
| Has the autoclave been checked by facilities in the last 3 months | * Yes * No |  |  |
| *Add or remove sections as needed for your lab* | * Yes * No |  |  |

## annual Inspection Checklist

|  |  |  |  |
| --- | --- | --- | --- |
| annual inspection checklist Date: \_\_\_\_\_\_\_\_\_\_\_\_ Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Item | Check | Deficiencies | Solution |
| **Chemicals** | | | |
| Have peroxide formers been regularly tested for peroxide formation (see [Chemical Safety Manual](https://hse.ok.ubc.ca/safety/chemsafety/lab-safety-guidebook/)) | * Yes * No |  |  |
| Is there an up-to-date chemical inventory available? | * Yes * No |  |  |
| Are SDSs available for each chemical in the lab? | * Yes * No |  |  |
| Are SDSs less than 3 years old? | * Yes * No |  |  |
| **Safety Equipment** | | | |
| Have fire extinguishers been inspected by facilities within the last 12 months? | * Yes * No |  |  |
| Has facilities tested the emergency drench shower in the last 12 months? | * Yes * No |  |  |
| Has facilities tested the emergency eye wash in the last 12 months? | * Yes * No |  |  |
| Has the fume hood been recertified in the last 12 months? | * Yes * No |  |  |
| Has the Biological Safety Cabinet and/or Laminar Flow hoods been certified in the last 12 months? | * Yes * No |  |  |
| Is there a record of an HSE inspection within the last 1-5 years? | * Yes * No |  |  |
| Are there records of regular lab self-inspections? | * Yes * No |  |  |
| *Add or remove sections as needed for your lab* | * Yes * No |  |  |

## Inspection Checklist

|  |  |  |  |
| --- | --- | --- | --- |
| inspection checklist Date: \_\_\_\_\_\_\_\_\_\_\_\_ Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Type of Inspection:  🞎 Weekly 🞎 Monthly 🞎 Quarterly 🞎 Yearly | | | |
| Item | Check | Deficiencies | Solution |
| **Category** | | | |
|  | * Yes * No |  |  |
|  | * Yes * No |  |  |
|  | * Yes * No |  |  |
|  | * Yes * No |  |  |
| **Category** | | | |
|  | * Yes * No |  |  |
|  | * Yes * No |  |  |

1. Flammables may not be stored in the lab in containers greater than 5 L. [↑](#footnote-ref-1)