|  |  |
| --- | --- |
| SoMS\_HS\_042 |  |
|  |
| New/refurbished lab checklist |
|  |  |

The purpose of this checklist is to provide guidance to Laboratory Managers on the main issues that should be addressed prior to starting up a new/refurbished lab carrying out biological, chemical, or radiation work.

Where there is a “no” answer you must use your judgement on whether or not to start operations without the item in place, consult your health and safety coordinator if you are unsure. Refer to the Australian Standards 2243 Safety in Laboratories for detailed advice on laboratory design.

This is separate to the process of certification for OGTR and Radiation work – A special inspection is required; contact the Biosafety Co-ordinator and Radiation Co-ordinator to arrange.

|  |  |  |
| --- | --- | --- |
| Date checklist completed : | | Date lab work due to begin : |
| Responsible person for the area: |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| Faculty: | School: | Building: | Room number: |

|  |  |
| --- | --- |
| Brief description of tasks in the lab |  |

|  |  |
| --- | --- |
| OGTR Certification Reference (if applicable) |  |
| Radiation Licence Reference (if applicable) |  |

|  |  |
| --- | --- |
| Items | **Yes/No/**  **n/a** |
| **Signage** | |
| Safety Hazards poster on the door |  |
| Cabinets, fridges and storage space have appropriate signage |  |
| Exit sign (green running man) clearly displayed |  |
| Extinguisher, hose reel, WIPhone signed |  |
| Emergency control organisation personal list near-by |  |
| Lab sinks signed (no drinking/no pouring chemicals down the sink) |  |
| OGTR certification on the door |  |
| List of authorised personnel on the door |  |
| Radiation Licence number on the door |  |
| **Access** | |
| Keys/swipe access provided to appropriate people (once inducted) |  |
| Dedicate person(s) assigned to carry out inductions of the area |  |
| All persons have carried out required training before accessing the area |  |
| **Transport** | |
| Dangerous good lift protocol in place |  |
| Dangerous goods lift keys available |  |
| Trolley available for transport of items into/out of the lab |  |
| Vinyl flooring along the transport route for goods into/out of the lab |  |
| Resources available inside the lab for double-containment of items to be transported (e.g. plastic esky’s, zip-lock bags) |  |
| **Personal Protective Equipment** | |
| Storage space available for PPE (e.g. coat hooks, safety glasses pigeon hole, fresh/laundered coats) |  |
| PPE disposal/cleaning drop off area available |  |
| All necessary PPE identified and available |  |
| **Emergency** | |
| Building evacuation alarm audible/visible |  |
| Emergency lighting sufficient |  |
| Appropriate fire extinguishers near-by for the hazards available |  |
| First aid box near-by |  |
| Fire warden for the area |  |
| First aider for the area |  |
| Emergency exit routes accessible |  |
| After-hours emergency response person details for the room with UNSW security control room |  |
| Emergency response person details for all alarmed equipment (e.g. -80 freezers) with UNSW security control room |  |
| Emergency stop buttons labelled and tested |  |
| Emergency stop buttons protected from accidental activation |  |
| UNSW Building Emergency Procedures map updated |  |
| Emergency shower & eye wash available |  |
| Emergency showers testing schedule set-up |  |
| Emergency showers have curtain around them if there is a risk of splash onto electrical equipment |  |
| Bucket and curtain available for testing the emergency shower |  |
| Bunding available in case emergency shower is used (to prevent spread of water) |  |
| Unibeat sticker with emergency numbers on all phones |  |
| Emergency procedures flipchart on display |  |
| Fire doors close fully without force required |  |
| **Gas and gas detection** | |
| Operator manuals available |  |
| Induction provided by the installer |  |
| Gas monitoring panel is appropriately labelled and has a map of alarm locations |  |
| Gas monitoring display is located outside the lab |  |
| Gas sensor in appropriate location for the gas properties(e.g. low-level for dense gases/head-level/high level for light gases) |  |
| Emergency gas shut offs tested (to ensure solenoid valves functioning correctly) |  |
| Pressure of gas entering lab suitable for the equipment |  |
| Gas alarm emergency response procedure on display |  |
| Gas detector regular testing & maintenance set-up with FM (asset tagged) |  |
| Asphyxiant / flammable/ toxic gas [ready reckoner](http://www.ohs.unsw.edu.au/ohs_hazards/chemical.html) completed where necessary |  |
| **Compressed Gas Cylinders** | |
| Gas cylinders kept to a minimum |  |
| Gas cylinders secured against falling |  |
| Cylinders are properly labelled |  |
| Regulators available for cylinders |  |
| Regular service & maintenance for cylinders arranged |  |
| Arrangements have been made for the safe transport of cylinders |  |
| Arrangements in place for delivery and supply of cylinders |  |
| **Chemicals** | |
| Fume cupboard certified as functioning |  |
| Fume cupboard regular testing & maintenance set-up with FM (asset tagged) |  |
| Dedicated location for chemical waste storage inside the lab with bunding |  |
| Scheduled drugs stored in secured cabinet and bound-register book near-by |  |
| All engineering controls (e.g. ventilation) regular testing & maintenance with FM |  |
| All storage cabinet keys available |  |
| Storage cabinets labelled |  |
| Flammable cabinets not within 3 m of ignition source |  |
| Provision to store chemicals appropriately according to DG class |  |
| Chemical spill kit available |  |
| SDS available for chemicals |  |
| Building Dangerous Goods manifest updated |  |
| Intrinsically safe fridge available for flammable chemicals (if cold storage required) |  |
| Arrangements in place for storage and disposal of chemical waste inside and outside the lab |  |
| **Biological Materials** | |
| Biological waste bins available |  |
| Arrangements in place to store bins prior to collection for disposal. |  |
| Suitable location for storage of disinfected waste inside the lab |  |
| Appropriate class of Biological safety cabinets installed and tested |  |
| Biological safety cabinets (BSC) decontaminated prior to move and recertified once moved |  |
| Arrangements in place for regular certification of BSC |  |
| Sharps disposal bins available |  |
| Areas available for gloves storage |  |
| Hands-free handwash basin at lab exit points |  |
| Disinfectant available |  |
| Biological spills kit available |  |
| Biosafety Supervisor and Coordinator informed of new/change of location |  |
| **Radioactive Materials** | |
| Radiation experiments approved by Radiation Safety Committee |  |
| Lockable facility available for storage of radioisotopes (if relevant) |  |
| Personal dosimeters provided to all individuals and dose monitoring set up |  |
| Radiation working areas segregated from other laboratory areas and work surfaces labelled “caution radiation” |  |
| Equipment to be used in active areas labelled “caution radiation” , with trefoil and used only for that purpose |  |
| Suitable contamination monitoring instruments provided, maintained and calibrate (e.g. Geiger counter) |  |
| Arrangements in place for regular surface contamination monitoring |  |
| Radiation work conducted in secondary containment facilities e.g. spill trays, bench coat |  |
| Remote handling tools available such as forceps used to maximise distance and reduce dose |  |
| Suitable shielding available for experimental and waste storage areas |  |
| Radioactive substances stored separately from other substances |  |
| Staff have up-to-date licenses |  |
| Student license exemptions on display in the area |  |
| Arrangements in place for waste disposal |  |
| Radiation spill kit available |  |
| Radiation Safety Supervisor and Coordinator informed of new/change of location |  |
| **Equipment** | |
| All essential equipment on back-up power supply |  |
| Electrical testing or “New to Service” tag on all electrical equipment |  |
| Arrangements in place for future testing and tagging arrangements |  |
| Electrical equipment in flammable atmospheres intrinsically safe |  |
| Power sockets tested to ensure they all work |  |
| Electrical distribution boards labelled and locked |  |
| Any local exhaust ventilation equipment has a service/testing schedule in line with fumehoods |  |
| Location available for storage of cleaners equipment (mop, bucket etc) |  |
| Chairs on castors that do not pose a hazard (e.g. roll away when attempt to sit on them) – |  |
| All furniture and work surfaces impervious/non-absorbent |  |
| Under bench storage cupboards easily moveable for cleaning/decontamination purposes |  |
| Testing and maintenance arrangements in place for all local exhaust ventilation |  |
| Air extractions have strip of paper indicating that suction is happening |  |
| Broken glass waste container available |  |
| Windows closed and sealed |  |
| Telephone and data port available inside the lab |  |
| **Records** | |
| Risk assessment for the tasks in the lab available |  |
| SWP for each procedure and equipment in the lab available (& on display where relevant) |  |
| Chemical register available for all chemicals in the lab |  |
| Biohazard register available for all biohazards in the lab |  |
| Radioisotope inventory available |  |
| Schedule 8 drugs register available for any drugs in the lab |  |
| Plant register/inspection testing monitoring plan in place |  |
| Location in the lab/office for all health & safety records |  |
| Lab occupants have access to SDS and other safety paperwork (in a folder or on a computer) |  |
| Safety committee notified of new/refurbished lab |  |
| Lab induction records available |  |
| Training records and SWP sign off sheets available |  |
| Lab added to building workplace inspection schedule |  |

**ACTION PLAN**

Use this table to document actioned identified from the checklist

|  |  |  |
| --- | --- | --- |
| **Task** | **By who** | **By when** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |