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| https://www-p.unisa.edu.au/styleguide/logos/images/logo_unisa_RGB-blue.png | WHS FORM | | | | | | | | | **WHS17** |
| WORKSITE INSPECTION – Laboratory Environment & chemical handling areas | | | | | | | | | Page 1 of 7 |
| **Unit or Research Institute:** | | | | **Location:** | | | | **Date:** | | |
| **Inspected by:** | | | | | | **Signed:** | | | | |
| * The Workplace Inspection checklist may be modified locally to ensure appropriateness and relevance to the local environment. Please monitor this master form for updated versions. * The action taken and date & sign-off on completion must be recorded. | | | | | | | | | | |
| **Inspection Items** | |  | **Opportunity for Improvement** | | **Person Responsible for Action** | | **Action Taken** | | **Date Completed & Sign-off** | |
| Administrative & Miscellaneous | |  |  | |  | |  | |  | |
| Are laboratory safety behaviours consistent with organisational expectations? | | Yes / No |  | |  | |  | |  | |
| Are SOPs or safe working rules specific to the laboratory developed and implemented? | | Yes / No |  | |  | |  | |  | |
| Are staff trained or instructed on the SOPs and lab safety rules? | | Yes / No |  | |  | |  | |  | |
| Are records kept of personnel trained or instructed, maintenance & servicing, and testing of equipment? | | Yes / No |  | |  | |  | |  | |
| Are all gas taps labelled? | | Yes / No |  | |  | |  | |  | |
|  | |  |  | |  | |  | |  | |
| Housekeeping | |  |  | |  | |  | |  | |
| Are floors clean, dry, and free from slip/trip hazards? | | Yes / No |  | |  | |  | |  | |
| Is the workplace free from accumulation of equipment, redundant chemicals, contaminated waste or rubbish? | | Yes / No |  | |  | |  | |  | |
| Is shelving stable, free of extraneous material and not too high? | | Yes / No |  | |  | |  | |  | |
| Are walkways free of obstruction? | | Yes / No |  | |  | |  | |  | |
| Are chemical storage facilities in good condition? | | Yes / No |  | |  | |  | |  | |
| Are trolleys, pallet jacks, walkie-stackers, and other manual handling aids in good working order? | | Yes/No |  | |  | |  | |  | |
| Fire | |  |  | |  | |  | |  | |
| Are all fire extinguishers/equipment suitable, appropriately located, mounted and identified? | | Yes / No |  | |  | |  | |  | |
| Are all fire extinguishers regularly checked? | | Yes / No |  | |  | |  | |  | |
| Are fire hose reels regularly checked? | | Yes / No |  | |  | |  | |  | |
| Are fire sprinklers and/or detector heads free from damage? | | Yes / No |  | |  | |  | |  | |
| Are there an adequate number of trained emergency wardens? | | Yes / No |  | |  | |  | |  | |

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| Exits |  |  |  |  |  |
| Are exits and corridors free from obstruction? | Yes / No |  |  |  |  |
| Are exit signs illuminated and clearly visible? | Yes / No |  |  |  |  |
| Is there an adequate number of exits? | Yes / No |  |  |  |  |
| Are all exit doors unlocked? | Yes / No |  |  |  |  |
| Is emergency lighting installed? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Environmental |  |  |  |  |  |
| Are written procedures available for disposal of chemicals and regular collection of chemical wastes? | Yes / No |  |  |  |  |
| Are staff trained in environmentally sound waste disposal procedures? | Yes / No |  |  |  |  |
| Are all waste containers appropriately labelled with Class Diamonds? | Yes / No |  |  |  |  |
| Is waste segregated and stored correctly bunded away from drains? | Yes / No |  |  |  |  |
| Are records of waste disposal kept in line with procedures? | Yes / No |  |  |  |  |
| Is there evident that waste is not tipped down the sink? (unless approved method) | Yes/ No |  |  |  |  |
| Are all lights working & lighting levels suitable for tasks? | Yes / No |  |  |  |  |
| Is ventilation adequate? | Yes / No |  |  |  |  |
| Are there acceptable atmospheric contamination levels (fumes, dust, vapours)? | Yes / No |  |  |  |  |
| Are emergency spill and clean-up kits/bins readily available, stocked properly, correct for the type of spills anticipated? | Yes/ No |  |  |  |  |
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| Chemical safety |  |  |  |  |  |
| Are all hazardous chemicals in the lab entered into *Chemwatch* *GoldFFX*? | Yes / No |  |  |  |  |
| Has the annual chemical stocktake for this lab area been completed in the last 12 months? (All chemicals in the lab MUST be present in the Chemwatch manifest) | Yes/ No |  |  |  |  |
| Do all laboratory personnel have ready access to Safety Data Sheets through *GoldFFX* (or hardcopy if necessary)? | Yes / No |  |  |  |  |
| Are all chemicals and containers correctly labelled? | Yes / No |  |  |  |  |
| Are chemicals stored in compatible containers? | Yes / No |  |  |  |  |
| Are chemicals compatible in storage areas? (*GoldFFX* Incompatibility Report filter can assist) | Yes / No |  |  |  |  |
| Are stored chemicals bunded and not near drains? | Yes/ No |  |  |  |  |
| Are there any flammable solids (Class 4.1) or substances that are liable to spontaneously combust (Class 4.2) in the lab? If yes, are they labelled appropriately with opening and expiry date? (*GoldFFX* Query Builder search can assist) | Yes/ No |  |  |  |  |
| Is WHS12 completed for all laboratory processes involving hazardous chemicals? | Yes/ No |  |  |  |  |
| Is the area free of any leakage of hazardous chemicals? | Yes / No |  |  |  |  |
| Is storage of chemicals in fume cupboards avoided? | Yes / No |  |  |  |  |
| Are refrigerators in laboratory environments free of any foods, drinks or other human consumables? | Yes / No |  |  |  |  |
| Are only compliant purpose-built liquid nitrogen dewars used in this lab (i.e. no modified thermos' or plastic containers)? | Yes / No |  |  |  |  |
| Have all small (<30L) pressurised liquid nitrogen dewars in the lab been inspected for signs of external damage and ice build-up? | Yes / No |  |  |  |  |
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| Flammable liquids |  |  |  |  |  |
| Are flammable liquids stored in appropriate containers? | Yes / No |  |  |  |  |
| Are solvents separated from corrosives? | Yes / No |  |  |  |  |
| Are appropriate warning signs on the flammables cabinet? | Yes / No |  |  |  |  |
| Are dry powder fire extinguishers accessible? | Yes / No |  |  |  |  |
| Are flammables, if kept in refrigeration, only stored in suitable purpose-built laboratory fridges or freezers (not in domestic fridges)? | Yes / No |  |  |  |  |
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| Compressed gas cylinders |  |  |  |  |  |
| Gas name/label on shoulder of each cylinder clearly legible? | Yes / No |  |  |  |  |
| Are cylinders secured by brackets or chains? | Yes / No |  |  |  |  |
| Are fuel cylinders separated from oxidising cylinders by a minimum of 3 metres? | Yes / No |  |  |  |  |
| Are gas cylinder regulators and manifolds free from damage and functioning correctly? | Yes / No |  |  |  |  |
| Are empty cylinders separate from full cylinders & clearly identified? | Yes / No |  |  |  |  |
| Are flammable gas (i.e. Class 2.1 acetylene) cylinders that are not in use stored outside of building? | Yes / No |  |  |  |  |
| Are cylinder valves closed when not in use? | Yes / No |  |  |  |  |
| Does testing for gas leaks occur when regulators are connected to the gas cylinders? | Yes / No |  |  |  |  |
| Are all gas cylinders stored in a well ventilated area? | Yes / No |  |  |  |  |
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| Fume cupboards |  |  |  |  |  |
| Are electrical services located outside of chamber? | Yes / No |  |  |  |  |
| Are emergency isolators accessible for electrical & gas and are they clearly marked? | Yes / No |  |  |  |  |
| Are there warning signs indicating a maximum of 2.5 litres of flammable liquid in chamber at any given time? | Yes / No |  |  |  |  |
| Are fume scrubbers installed where appropriate? | Yes / No |  |  |  |  |
| Are fire extinguishers located within 4 metres of fume cupboard? | Yes / No |  |  |  |  |
| Are the fume cupboards regularly tested by FMU, including for a face velocity of 0.5 metres per second? | Yes / No |  |  |  |  |
| Are fume cupboards and surrounds kept tidy with no disturbances to airflow? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Biological safety |  |  |  |  |  |
| Are contaminated waste procedures developed & implemented? | Yes / No |  |  |  |  |
| Are sharps (needles, syringes, pipettes, scalpels, razors, etc) stored appropriately? | Yes / No |  |  |  |  |
| Are risk group category and containment procedures in place & adhered to? | Yes / No |  |  |  |  |
| Are disposable gloves available & used when specimens are handled? | Yes / No |  |  |  |  |
| Is appropriate decontamination of work surfaces in practice? | Yes / No |  |  |  |  |
| Recombinant DNA project work has been assessed and certified by the University’s Institutional Biosafety Committee & by the Human Research Ethics Committee (if applicable). | Yes / No |  |  |  |  |
| Recombinant DNA laboratory areas have been inspected and certified by the University’s Institutional Biosafety Committee (if applicable). | Yes / No |  |  |  |  |
| Is aerosol production minimised & contained? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Radiation safety |  |  |  |  |  |
| Do laboratory designs comply with relevant Australian Standard requirements? | Yes / No |  |  |  |  |
| Are specific areas designated for radiation procedures? | Yes / No |  |  |  |  |
| Is appropriate monitoring equipment readily available? | Yes / No |  |  |  |  |
| Are personal monitoring procedures in place? | Yes / No |  |  |  |  |
| Is adequate & sufficient shielding provided? | Yes / No |  |  |  |  |
| Is radioactive material securely stored? | Yes / No |  |  |  |  |
| Are absorbent materials available to contain spills? | Yes / No |  |  |  |  |
| Are radioactive waste/storage procedures in place? | Yes / No |  |  |  |  |
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| Electrical installations |  |  |  |  |  |
| Is in-service inspection, testing & tagging of portable electrical equipment done in accordance with the procedure for Electrical Equipment Inspection and Testing? | Yes / No |  |  |  |  |
| Are adequate power points available & unobstructed? | Yes / No |  |  |  |  |
| Are switches & power points in good condition (no cracks, loose face plates)? | Yes / No |  |  |  |  |
| Are power leads in good condition, no trip hazards? | Yes / No |  |  |  |  |
| Are circuit breakers & main isolators clearly marked? | Yes / No |  |  |  |  |
| Is excessive use of extension cords avoided? | Yes / No |  |  |  |  |
| Is there any temporary wiring? | Yes / No |  |  |  |  |
| Are double adaptors or piggy back adaptors avoided? | Yes / No |  |  |  |  |
| Are excessive power boards being avoided? | Yes/ No |  |  |  |  |
| Is a carbon dioxide fire extinguisher adjacent to the switch board? | Yes / No |  |  |  |  |
| Have electrical ignition sources been controlled in flammable environments (eg intrinsically safe fittings/equipment)? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Machinery & equipment |  |  |  |  |  |
| Are operating instructions/safety signs adequate & clear? | Yes / No |  |  |  |  |
| Are emergency stop switches accessible, red in colour? | Yes / No |  |  |  |  |
| Do interlocks on machine guards operate, with regular testing? | Yes / No |  |  |  |  |
| Are safety glasses areas clearly sign posted? | Yes / No |  |  |  |  |
| Are moving parts, belt drives, shafts, fans appropriately guarded? | Yes / No |  |  |  |  |
| Are machines & equipment free from obstruction? | Yes / No |  |  |  |  |
| Is there adequate distance between machines & equipment? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Personal Protective Equipment PPE |  |  |  |  |  |
| Is the correct PPE readily available when required? | Yes / No |  |  |  |  |
| Is PPE stored and maintained correctly? | Yes / No |  |  |  |  |
| Have staff been trained or instructed in correct use, maintenance and storage of PPE? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| First Aid |  |  |  |  |  |
| Are there trained first aid personnel? | Yes / No |  |  |  |  |
| Are there first aid kits available and adequately stocked for the types of hazards and level of risk ie chemical burns? | Yes / No |  |  |  |  |
| Are first aid personnel identifiable? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| Emergency procedures |  |  |  |  |  |
| Have emergency procedures been established for specific hazardous circumstances including spills? | Yes / No |  |  |  |  |
| Are there suitable spill kits available, stocked and identifiable relevant to the area? ie Laboratory Spill Kit, 240L Wheelie Bin | Yes / No |  |  |  |  |
| Are staff adequately trained to deal with minor spills? | Yes / No |  |  |  |  |
| Are staff aware of response procedures for minor and major spills? | Yes / No |  |  |  |  |
| Are emergency plans and contact numbers displayed? | Yes / No |  |  |  |  |
| Are regular evacuation drills carried out? | Yes / No |  |  |  |  |
| Has an evacuation drill taken place in the last 12 months? | Yes / No |  |  |  |  |
|  |  |  |  |  |  |
| **Alarms and Testing** |  |  |  |  |  |
| Is a local response protocol in place for specialised alarms, e.g. O2 depletion, CO2? | Yes/ No |  |  |  |  |
| Have local alarms been checked for connection to CEMS / Gallagher? | Yes/ No |  |  |  |  |
| Are Safety Showers and Eye Wash Stations been tested monthly? | Yes/ No |  |  |  |  |
| Are gas and/or power isolation buttons tested? | Yes/ No |  |  |  |  |
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