



**UNIVERSITY OF  
CAMBRIDGE**

**Health and Safety Office**

## **Laboratory Safety Inspection Checklist**

Note: In view of the specialised nature of laboratories inspections should be undertaken by, or in the presence of personnel familiar with the inherent dangers involved and the safety precautions necessary.

|                                   |              |
|-----------------------------------|--------------|
| <b>Area of inspection:</b>        |              |
| <b>Person responsible:</b>        |              |
| <b>Inspection carried out by:</b> | <b>Date:</b> |

|                                                                                                  | Yes | No | N/A | Comments |
|--------------------------------------------------------------------------------------------------|-----|----|-----|----------|
| <b>Information, signs and labels:</b>                                                            |     |    |     |          |
| 1. Laboratory Safety Management Plan available                                                   |     |    |     |          |
| 2. Departmental Safety Handbook available                                                        |     |    |     |          |
| 3. Statutory safety signs and notices clearly displayed                                          |     |    |     |          |
| 4. Standard operating procedures for routine operations / risk assessments available and current |     |    |     |          |
| 5. Is there evidence that the risk assessments etc are being complied with                       |     |    |     |          |
| 6. Chemical hazard signage where needed                                                          |     |    |     |          |
| 7. Radiation hazard trefoil / signage where needed                                               |     |    |     |          |
| 8. Biological hazard trefoil / signage where needed                                              |     |    |     |          |
| 9. Training records kept                                                                         |     |    |     |          |
| <b>Housekeeping / general lab safety:</b>                                                        |     |    |     |          |
| 10. Walkways and floor area clear and uncluttered and free from trip hazards                     |     |    |     |          |
| 11. Work areas tidy and free from obstructions (include knee-holes)                              |     |    |     |          |
| 12. Bench tops free of excess storage and materials not in use                                   |     |    |     |          |

|                                                                                                                        | Yes | No | N/A | Comments |
|------------------------------------------------------------------------------------------------------------------------|-----|----|-----|----------|
| 13. Bench tops and coverings free of visible contamination                                                             |     |    |     |          |
| 14. Balance areas clean and free from visible contamination                                                            |     |    |     |          |
| 15. Sinks clear of clutter, glassware                                                                                  |     |    |     |          |
| 16. Heat guns switched off at mains when not in use                                                                    |     |    |     |          |
| 17. Shelves accessible, properly secured and loaded                                                                    |     |    |     |          |
| 18. Storage above eye level minimised                                                                                  |     |    |     |          |
| 19. All portable electrical equipment tested (include radios)                                                          |     |    |     |          |
| 20. Trailing cables / leads, overloaded multi-gang adaptors                                                            |     |    |     |          |
| 21. All electrical equipment placed so as to avoid risk of damage                                                      |     |    |     |          |
| 22. Vacuum lines covered with mesh                                                                                     |     |    |     |          |
| 23. Rotary evaporators have plastic coating or covered with mesh                                                       |     |    |     |          |
| 24. Pressure systems documented and checked                                                                            |     |    |     |          |
| 25. All fridges / freezers have had ignition sources removed and are labelled to this effect                           |     |    |     |          |
| 26. Fridge boxes used and contents labelled                                                                            |     |    |     |          |
| 27. Fridges and freezers need defrosting                                                                               |     |    |     |          |
| 28. Waste properly segregated (glass, sharps, chemical etc)                                                            |     |    |     |          |
| 29. Hand washing facilities available and free from contamination                                                      |     |    |     |          |
| 30. Evidence of eating and drinking in lab                                                                             |     |    |     |          |
| 31. No storage of food and drink in lab and lab fridges / freezers unless clearly labelled 'Not for human consumption' |     |    |     |          |

|                                                                                                                                                                                                                                   | Yes | No | N/A | Comments |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|----------|
| <b>Personal Protective equipment:</b>                                                                                                                                                                                             |     |    |     |          |
| 32. Chemical resistant gloves available and worn                                                                                                                                                                                  |     |    |     |          |
| 33. Eye protection available and worn                                                                                                                                                                                             |     |    |     |          |
| 34. Protective clothing available and worn                                                                                                                                                                                        |     |    |     |          |
| 35. Appropriate respiratory protection available                                                                                                                                                                                  |     |    |     |          |
| 36. Respirators cleaned, stored, inspected regularly                                                                                                                                                                              |     |    |     |          |
| <b>Chemicals / chemical storage:</b>                                                                                                                                                                                              |     |    |     |          |
| 37. Chemicals used or stored in area                                                                                                                                                                                              |     |    |     |          |
| 38. Up-to-date inventory maintained for all chemicals / hazardous materials                                                                                                                                                       |     |    |     |          |
| 39. Storage areas neat and clean                                                                                                                                                                                                  |     |    |     |          |
| 40. Containers clearly labelled with chemical names (in English), CAS Numbers, percent composition (for mixtures), and hazard warnings                                                                                            |     |    |     |          |
| 41. Containers labelled with receipt date and group name                                                                                                                                                                          |     |    |     |          |
| 42. Chemicals are segregated and stored according to chemical compatibilities [flammables away from oxidizers, acids separate from bases, incompatible acids separated (eg. nitric and sulphuric acid not with acetic acid,) etc] |     |    |     |          |
| 43. All chemical storage cabinets banded / spill trays used                                                                                                                                                                       |     |    |     |          |
| 44. Corrosives stored in acid cabinets                                                                                                                                                                                            |     |    |     |          |
| 45. Flammable liquids stored in approved fire-resistant cabinets                                                                                                                                                                  |     |    |     |          |
| 46. Quantity of flammable liquid stored in lab not in excess of 50 litres                                                                                                                                                         |     |    |     |          |
| 47. Minimum quantity of flammable liquid stored on open bench                                                                                                                                                                     |     |    |     |          |
| 48. Ignition sources avoided when using / storing flammables                                                                                                                                                                      |     |    |     |          |

|                                                                                                  | Yes | No | N/A | Comments |
|--------------------------------------------------------------------------------------------------|-----|----|-----|----------|
| 49. Storage of chemicals above eye level avoided                                                 |     |    |     |          |
| 50. Chemicals stored away from light and heat sources                                            |     |    |     |          |
| 51. Chemical containers are in good condition, labels intact, metal cans free of rust            |     |    |     |          |
| 52. Containers closed unless actively adding/removing contents                                   |     |    |     |          |
| 53. Water and air reactive compounds are sealed against exposure to water                        |     |    |     |          |
| 54. Large containers stored near the floor                                                       |     |    |     |          |
| 55. Winchesters and glass bottles on floor                                                       |     |    |     |          |
| 56. Winchester bottle carriers utilized when transporting hazardous chemicals between work areas |     |    |     |          |
| 57. All personnel know the location of chemical inventory, MSDS, and related reference material  |     |    |     |          |
| 58. All personnel familiar with physical and health hazards of chemicals in work area            |     |    |     |          |
| 59. All personnel know how to protect themselves and others from effects of hazardous materials  |     |    |     |          |
| 60. Chemical waste properly segregated and labelled (chlorinated, non-chlorinated etc)           |     |    |     |          |
| 61. Chemical waste allowed to accumulate                                                         |     |    |     |          |
| <b>Fume Cupboards / LEV:</b>                                                                     |     |    |     |          |
| 62. Fume cupboards free of clutter                                                               |     |    |     |          |
| 63. Large pieces of equipment raised to allow airflow                                            |     |    |     |          |
| 64. Procedures conducted at least 150mm inside cupboard                                          |     |    |     |          |
| 65. Sash lowered to optimum setting and closed when left unattended                              |     |    |     |          |

|                                                                                   | Yes | No | N/A | Comments |
|-----------------------------------------------------------------------------------|-----|----|-----|----------|
| 66. Local exhaust ventilation / fume extraction systems operating correctly       |     |    |     |          |
| 67. Extraction systems inspected in last 14 months                                |     |    |     |          |
| <b>Compressed gases:</b>                                                          |     |    |     |          |
| 68. Cylinders stored upright and properly secured at all times                    |     |    |     |          |
| 69. Cylinders capped when not in use                                              |     |    |     |          |
| 70. Correct regulations used for type of gas, pressure bled when not in use       |     |    |     |          |
| 71. Regulators checked and display valid test sticker                             |     |    |     |          |
| 72. Cylinders in good condition and clearly marked                                |     |    |     |          |
| 73. Empty cylinders promptly removed from lab                                     |     |    |     |          |
| 74. Flammable gases separated from oxidising gases by distance, wall or partition |     |    |     |          |
| <b>Biological safety:</b>                                                         |     |    |     |          |
| 75. GM risk assessments available and fulfil requirements of containment level    |     |    |     |          |
| 76. Inventory of biological agents maintained                                     |     |    |     |          |
| 77. Validated deactivation procedures in place                                    |     |    |     |          |
| 78. Provision of disinfectant                                                     |     |    |     |          |
| <b>Radiation safety:</b>                                                          |     |    |     |          |
| 79. Designated areas / sinks                                                      |     |    |     |          |
| 80. Local rules in place                                                          |     |    |     |          |
| 81. Inventory of radioisotopes maintained                                         |     |    |     |          |
| 82. Proper shielding in place and being used correctly                            |     |    |     |          |
| 83. Records kept                                                                  |     |    |     |          |

|                                                                                                                     | Yes | No | N/A | Comments |
|---------------------------------------------------------------------------------------------------------------------|-----|----|-----|----------|
| 84. Fridges / freezers locked                                                                                       |     |    |     |          |
| 85. Regular monitoring (recorded)                                                                                   |     |    |     |          |
| <b>Emergency:</b>                                                                                                   |     |    |     |          |
| 86. Emergency fire and first aid numbers and procedures on display and understood by staff                          |     |    |     |          |
| 87. Fire doors maintained and kept clear                                                                            |     |    |     |          |
| 88. Fire extinguishers / fire blankets in designated place, clearly visible and unobstructed                        |     |    |     |          |
| 89. Appropriate fire extinguishers for hazard classification                                                        |     |    |     |          |
| 90. Have fire extinguishers been maintained in last 12 months                                                       |     |    |     |          |
| 91. First-aid kit available, adequately stocked and items in date                                                   |     |    |     |          |
| 92. Safety shower / eyewash clearly visible and unobstructed                                                        |     |    |     |          |
| 93. Safety shower / eyewash regularly tested                                                                        |     |    |     |          |
| 94. Eyewash bottles sealed and in date                                                                              |     |    |     |          |
| 95. Spill control materials readily available and personnel familiar with how to use them                           |     |    |     |          |
| <p>(use this space to add any additional observations not already covered above – continue on a separate sheet)</p> |     |    |     |          |

**Recommendations / action to be taken:**

**Signed (Supervisor/Safety Representative):**

**Date:**

**Any faults noted above should be corrected as soon as possible and within four weeks of this inspection. The Departmental Safety Officer must be notified of any corrective action taken. A follow-up visit will be undertaken to ensure all points noted above have been addressed.**