

APPENDIX V

LABORATORY INSPECTION GUIDELINES AND FORM

The following guide has been developed to assist you in your scheduled safety surveillance of laboratories and departments under your auspices as lab supervisor. This guide is by no means all encompassing, however information contained after each item should assist you in determining whether your area may be in full, partial or non-compliance.

Keep in mind that all Federal, State and University rules, recommendations and regulations determine the compliance of our area concerning OSHA, EPA, NIH, CDC, and DOT. If you have any specific questions on the information below, please contact Occupational Health and Safety (257-3827).

1. Entrances, Exits, Hallways and Stairways - All entrances, exits, hallways and stairways must be clear and unobstructed.
2. Showers/Eye Wash Operative - Any area which deals with corrosive, flammable or otherwise hazardous material is required to have immediate access to eyewash and drench shower facilities. Eye wash bottles are not adequate equipment. All showers and eye wash equipment must be in full operational order and unobstructed. Monthly inspections are required.
3. Personal Protective Equipment - Personal Protective Equipment such as goggles, masks, gloves and cover gowns must be readily available and not worn outside the immediate work areas. Lab coats and appropriate shoes shall be worn to avoid any contact with harmful materials. Respirators shall be used when applicable. Evidence of respirator training and certification must be readily available.
4. Fire Extinguisher/Inspection and Location - All fire extinguishers must be inspected annually. Extinguishers must be properly mounted, unobstructed and be properly labeled for the intended use. Training classes are offered through the UK Fire Marshal.
5. Pressurized Cylinders - All cylinders must be stored in proper locations. All cylinders must be secured in an upright position and properly restrained to prevent falling. Containers must be labeled for contents and usage. Maximum number of cylinders of a flammable gas shall be not more than 3 (10" x 50") per 500 square feet in an unsprinkled space or not more than 6 (10" x 50") in a sprinkled space of 500 square feet. Liquefied gas cylinders in laboratory work areas shall not exceed 3 cylinders (9" x 30") in a sprinkled space or exceed 2 cylinders (9" x 30") in an unsprinkled space.

6. Room Use Identification - All access doors must be marked when rooms or areas are being used for chemical, biological or radioactive purposes as outlined in the UK Chemical Hygiene Plan. All doors must remain closed and the vision panel must remain unobstructed. Unattended labs shall be locked at all times.
7. UL Electrical Equipment and Cords - Only Underwriters Laboratories approved equipment and cords are authorized for use. Only UL listed multiple outlet strips equipped with 15 AMP circuit breakers are approved.
8. Laboratory chemical hood Operation - Face Velocities should be between 80 and 150 FPM at the working sash height with an optimum level of 100 FPM. The sash should never be higher than 12 inches except **when accessing equipment**. Hoods should not be located in high traffic areas or under air supply vents. The hood must have user spill protection and cup sinks must have spill guards.
9. Biological Safety Cabinets - Certification is required annually or any time the hood is moved or has had maintenance performed. Cabinets must not be located near high traffic areas or air supply ducts.
10. Hazardous Chemicals - All chemicals must be appropriately labeled and shall not be placed near or over floor drains. Flammable liquids must be stored in appropriate containers. There should be no more than 5 gallons of solvents or Class IA or IB flammables out in the lab per 100 sq. ft. No more than 10 gallons should be in specific storage cabinets per 100 sq. ft. For larger storage capacities and long term storage of flammable and solvents and approved storage area should be used. For more information consult to UK Fire Marshal.
11. Hazardous Waste Disposal - Hazardous waste training is required for all employees who handle hazardous material. The Office of Environmental Management (EM) gives training. A certification of training must be posted in laboratories. Contact EM for the time and date of classes.
12. Equipment and Utility Labeling - Refrigerators, ice machines and microwaves must be labeled for intended use. Food, personal medication and hazardous materials shall not be housed in the same refrigerator. All utility and plumbing lines need to be labeled and indicate the product contained; i.e., gas, water, etc.
13. Location of Cut-off Valves/Circuit Breakers - All cut off valves and breakers must be properly labeled.

14. General Safety (Dress, Eating, Smoking, etc.) - Eating, drinking, smoking and applying cosmetics is not permitted in a wet lab. Lab personnel shall not wear loose clothing (e.g. saris, dangling neckties, overly large or ragged lab coats), skimpy clothing (e.g. shorts and/or halter-tops), torn clothing, or unrestrained long hair. Perforated shoes, sandals, or cloth sneakers are not to be worn in labs.
15. Use of Flame and Heat - No heat generating devices should be left unattended.
16. Ventilation - Airflow in most labs should be "negative" with respect to the corridor. Laboratory doors shall be kept closed when laboratory procedures are in progress. Volatile hazardous materials shall not be used on the open bench top.
17. Housekeeping/Drains Flushed - All unnecessary material, boxes, and containers must be disposed of in the appropriate manner. All drains, including floor drains and cup sinks should be flushed with water on a weekly basis to eliminate sewer odors. Proper housekeeping must be maintained to provide adequate clearance of sprinkler systems and emergency equipment.
18. Sharps (Glass, Scalpel, Blades, Syringes, Etc.) - All sharps, needles and glass must be disposed of in an approved, labeled container. Glass containers and other potentially sharp objects shall not be disposed of in common office refuse. Containers must not be overfilled and must be labeled and sealed for proper handling and disposal.
19. Emergency lighting - Where necessary, emergency lighting units shall be properly mounted and unobstructed. If emergency lighting exists, it should be checked periodically to ensure it is functional.
20. Emergency Plans/Posted Numbers - All emergency and contingency plans and evacuation routes shall be clearly posted in conspicuous places. A list of emergency numbers and contacts must be kept updated and posted along side the emergency plans.
21. Safety Manuals - Manuals must be current and readily available for all employees.
22. Accidents Reported/Investigated - All accidents must be reported to the immediate supervisor for the completion of the appropriate form. File copies of reported incidents and accidents must be on hand, as well as the action taken to alleviate the safety hazard in the future.
23. Safety Training - This area is designated for lab safety training which is required by law.