LABORATORY SAFETY INSPECTION CHECKLIST

As part of EH&S's laboratory safety survey program, we have compiled a list of the most common safety problems. This is not a list of every possible hazard, but can be utilized as a guideline to conduct your own safety surveys. If you have any questions please contact EH&S at 5711 or 3302

Check if completed

Administrative

- ☐ Are safety training records (Lab Safety Training Checklist) maintained and available for review by employees, EH&S and outside agencies?
- ☐ Is the IIPP Binder in a location known and accessible to all (binder is maintained by the department Safety Coordinator)?
- ☐ Are employees aware of how to access Material Safety Data Sheets (MSDSs) and an updated inventory sheet of hazardous materials used in the workplace?
- ☐ Are safety inspection reports and corrections maintained and available for review by employees, EH&S and outside agencies?

General Safety Concerns

- ☐ Has an emergency information sign been posted outside the lab, indicating the hazards within and the responsible person?
- ☐ Are rooms and cabinets containing regulated hazardous substances, such as biohazards and radioactive materials, posted with warning/caution signs?
- ☐ Are exits and aisles free of obstructions in case of emergency?
- ☐ Do work areas have adequate ventilation and illumination?
- ☐ Are fire extinguishers maintained annually (tag indicates last date serviced)? Is the area in front of fire extinguishers or electrical panels free of obstructions?
- ☐ Are food and beverages kept out of work areas and out of laboratory refrigerators?
- ☐ Are spill kits/cleanup materials provided?
- ☐ Is the appropriate personal protective equipment required for the lab available and worn?
    - Safety glasses/goggles
    - Gloves
    - Lab coats
    - Aprons
    - No open-toed footwear
    - Face shield
- ☐ Are lab doors locked in the absence of any HSU employee (where applicable)?

Laboratory Equipment

- [ ] Are the eyewash and emergency shower stations properly maintained (see tag) and free of any obstructions which would prevent ready access?
- [ ] Have chemical fume hoods been tested within the year (check sticker)?
- [ ] Is air flow indicator present?
- [ ] Is storage within the hood minimized and are containers kept sealed?
- [ ] Is the front sash lowered to the appropriate level when hood is in use?
- [ ] Are biological safety cabinets certified annually or when moved (check sticker) and are they the proper types for the work being conducted?
- [ ] Are signs posted on the entry door to laboratories when a cabinet is in use so as to minimize changes in air flow?
- [ ] Is non-ionizing radiation equipment, such as lasers, microwaves, and ultraviolet light sources, properly posted and shielded?
- [ ] If compressed gas cabinets are used, are they in working order?
- [ ] Are compressed gas cylinders protected from external heat sources and stored in well protected, well-vented, and dry locations away from highly combustible materials?
- [ ] Are tanks dated (less than five years old) and properly labeled?
- [ ] Are incompatible gases stored separately?
- [ ] Are surplus cylinders kept at a minimum and not stored in the lab?
- [ ] Are cylinders stored so that they will not be damaged by falling objects nor subject to tampering by unauthorized persons?
- [ ] Are cylinders secured upright with welded chains and brackets bolted to a wall, bench or other secure object (no C-clamps)?
- [ ] Are protective caps in place while cylinders are not in use?
- [ ] Do refrigerators/freezers for storing flammable liquids have a manufacturer’s or U/L certification of explosion proof? Are they marked with "No Food" labels? (Are office refrigerators marked "Food Only/No Chemicals?")
- [ ] Has the manufacturer been contacted with regard to any modifications made to the safety features on laboratory equipment?
- [ ] Is the location of manuals /instructions for each piece of equipment known?

Hazardous Materials

- [ ] Are chemical containers properly labeled to identify original product names (or full chemical names), contents and hazards?
- [ ] Are chemicals stored according to hazard classification (acids, bases, flammable liquids, carcinogens, etc.) and are they seismically restrained?
- [ ] Are all containers of peroxide-forming chemicals dated upon receipt and disposed of within a year?
- [ ] Are flammable liquids stored in closed metal safety cans or cabinets whenever possible?
- [ ] Are flammable liquids always stored in cabinets when in excess of 10 gallons?
- [ ] Are flammable liquids stored away from sources of heat, ignition, electrical equipment or sources of static electricity, machinery with moving parts, and areas for mixing chemicals?
- [ ] Do flammable liquid storage cabinets not exceed thirty (30) gallons?
- [ ] Are the appropriate authorizations (ionizing radiation, biohazardous material) emergency procedures and other safety procedures posted in the labs?
- [ ] Is absorbent paper covering radioisotope work areas and is it marked with "caution radioactive material" tape? Is the absorbent paper in need of replacement (worn or thin)?
- [ ] Are lab personnel working in radionuclide work areas using body TLD badges/ring badges?

Hazardous Waste

- [ ] Is disposal of hazardous substances down the drain prevented?
- [ ] Is biohazardous waste decontaminated before disposal?
- [ ] Are the proper containers obtained and used for storing hazardous waste?
- [ ] Is all hazardous waste properly labeled (by the chemical name) and sealed?
- [ ] Are the appropriate categories of chemical waste segregated?
- [ ] Is liquid waste disposed in screwtop containers?
- [ ] Are all constituents in mixtures identified, as well as their concentrations?
- [ ] Are all "sharps" disposed in puncture resistant, leak-resistant containers and taped or sealed tightly to preclude loss of contents?

- [ ] Are all radioactive waste solids, liquids, and scintillation vials segregated properly?
- [ ] Is all dry solid radioactive waste placed in an EH&S-supplied container lined with a clear plastic bag?
- [ ] Are liquids scintillation vials placed in vial trays for disposal?
- [ ] Is lead separated from radioactive waste?
- [ ] Is aqueous waste separated from organic liquids?
- [ ] Do all personnel know how to have waste picked up?
- [ ] Are chemical and radioactive waste pickup forms available ?
- [ ] Are waste minimization procedures followed?
- [ ] Are lab personnel instructed to not dispose of chemicals by evaporation into a fume hood?

Seismic Safety

- [ ] Do shelves have lips or restraints to prevent chemical spillage?
- [ ] Are cabinets, bookshelves and furniture over 42 inches in height braced against walls to prevent their falling over in the event of an earthquake?
- [ ] Is overhead storage minimized and restrained?

Electrical Safety

- [ ] Are employees instructed not to use extension cords in place of permanent wiring?
- [ ] Are extension cords prevented from running through walls, ceiling or doors?
- [ ] Are extension cords, multiple outlet strips, or cube taps plugged directly into a wall outlet?
- [ ] Are extension cords 12' or less in length, 14-gauge (heavy duty) at a minimum, and servicing only one appliance or fixture?
- [ ] Are cord guards provided across an aisle or other passageway?
- [ ] Is electrical equipment inspected (with power off and unplugged) for frayed cords and damaged connections? Are these hazards reported and repaired by appropriate people?
- [ ] Is all electrical equipment grounded (three-prong plugs) or double insulated?

- [ ] Are 3-prong plugs only used for 3-prong receptacles, and never altered to fit into an outlet?
- [ ] Is the altering or removal of safety features of high voltage equipment prevented?
- [ ] Are all electrical boxes, panels and receptacles covered to protect against electrocution or shock?
- [ ] Is the multiple outlet strip cord 6' or less, and does the strip have a circuit breaker?
- [ ] Are control switches, circuit breakers and electrical panels free of obstructions?
- [ ] Are high voltage control panels and doors posted and closed with safety interlocks?

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Safety Coordinator's Signature Date

_____ _____

Department Head's Signature Date