

Laser Inspection Criteria

Category
Documentation

Criterion

- Chemical/biological/radiological material inventories are current and on file at EH&S.
- Access to the facility is controlled.
- Room corridor doors are closed unless held open by alarm-deactivating magnets.
- Appropriate signage is present on the entry door and within the lab (i.e. emergency contacts, appropriate biosafety level, radiation safety rules, equipment markings).
- Emergency action plan is posted.
- Current safety training records are available.
- Current safety manuals are available in lab or online, as appropriate.
- Standard Operating Procedures (SOPs) have been developed for use of hazardous (chemical/biological/radiological) materials and/or equipment.
- Safety Data Sheets (SDSs) for chemical/biological hazardous materials are available.
- Safety Surveys are being conducted and documented.
- Hazard Inventory Form is complete and on file for each employee.
- Laser users have completed a baseline eye exam.
- An up to date radiation use authorization is available in the lab.
- Laser SOP has been approved by the LSO.

General Safety

- Work practices are being performed safely.
- Good housekeeping is in evidence. (Exits and aisles are unobstructed. Areas are clean, uncluttered and trash is properly disposed.)
- Food, beverages, tobacco products, and cosmetics are absent from work areas.
- Sink, soap, and towels are available for hand washing.
- Electric items are used correctly (i.e. cords in good condition, breakered UL power strips, high wattage equipment plugged in directly, no extension cords or tandem power strips).
- Suitable personal protective equipment is available, worn, in good shape, left in the lab and stored properly.

Equipment

- Fire extinguishers are charged and unobstructed.
- Appropriate spill control kit is available.
- Appropriate first aid kit is available.
- Eyewash and safety shower are available, unobstructed and eyewash flushed monthly (documented) by occupants.
- Fume hoods are certified annually and used properly.
- Refrigeration equipment is properly labeled.
- Vacuum equipment is protected with a trapped or filtered properly.
- Secondary containment is being used with liquid hazardous materials and mercury containing equipment.
- The radioactive material or radiation producing device usage log is available and up to date.

Laser

- Laser optical viewing instruments are equipped with filters to keep exposures below MPE limit.
- Laser viewing portals in the protective housing are equipped with filters to keep escaping light below MPE limit.
- Laser protective housing is present and used.
- Laser protective housing interlocks work.
- Laser beam attenuator/shutter is operational.
- Laser entry way and control panel warning lights and/or alarms work.

Room door is interlocked with the laser system.

Laser is equipped with a removable master key switch and is inoperable when key is removed or has a secure system log in.

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Class 4 Laser: the emergency stop is identified and operable.

Class 4 Laser: a key control system is in place for interlock override system.

Class 4 Laser: interlock lights are operational.

Laser: the path is either above or below normal eye level (i.e. <4.5ft. Or >6.5ft.).

Laser: diffuse and specular reflection hazards have been assessed and minimized.

Laser: secondary beams are terminated.

Laser: the beam is enclosed as much as possible and the housing is interlocked with the laser system.

Laser: doors and windows are closed and covered.

Laser: protective eyewear is available, designed for proper wave length, and of proper optical density.

Laser: ventilation is appropriate (i.e. general, local, and near target).

Laser: the beam backstop is appropriate (i.e. fire resistant, diffuse reflectivity, low reflectivity).

Laser: Biological usage has been reviewed by the EH&S Biosafety group.

The beam ports are closed or filtered.

Chemicals and Storage

Containers (including waste) are appropriately labeled, with names spelled out and closed when not in use.

Incompatible chemicals are being stored separately and all chemicals are stored by hazard category.

Flammable liquids are being stored correctly. (>1gal in approved containers, >10gal (accumulative) in flammable cabinet)

Peroxide formers are properly labeled (yellow sticker), dated and disposed of by expiration date or tested as directed by policy.

Gas cylinders are secured, away from heat sources, and capped when not in use.

Unwanted Materials

Waste materials are being stored in a satellite accumulation area (SAA) at or near the point of generation, identified and complying with EH&S signage and picked up within 90 days.

Supplemental Information

No deficiencies noted at this time.

Additional Comments.

No deficiencies were noted in this space at the time of this survey.