

Section 3 - Safety Equipment

Safety equipment is an important resource in quickly and effectively dealing with emergency situations.

- Easy access to emergency equipment is essential to quick response.
- **Emergency equipment (fire extinguishers, fire blankets, eyewash stations, shower stations, and core shutoff doors) should never be blocked.**
- Ready access to at least two exits must be maintained at all times. EH&S inspects Cole Science Center regularly to verify that egress routes are not blocked.
- Evacuation Drills are also a key component in being able to get everyone safely out of a building in an emergency situation. Environmental Health and Safety and the Dean of the School of Natural Science arrange periodic drills, in coordination with the Cole Science Safety Committee, insuring that no research or class projects are taking place during the drill which would pose a real danger if left unattended.

3.1 FIRE EXTINGUISHERS

Faculty members, with the assistance of the Director of Environmental Health and Safety, should review the hazards in their laboratory on an ongoing basis to determine if the fire extinguisher(s) present are appropriate. If additional or different class extinguishers are needed, the faculty member should notify the Director of Environmental Health and Safety. Classes and types of extinguishers are described in Table 3.1.

| Table 3.1 TYPES and CLASSES OF FIRE EXTINGUISHERS | | |
|--|---|---|
| Class (Type)* | Use | Location in CSC |
| A (Water) | For ordinary combustibles (e.g., paper, wood) | Fire hoses are in hallway cabinets |
| BC (CO ₂) | For flammable liquids or electrical equipment (e.g., computers, ovens, instruments) | Entrances to the lab areas, at either end of the building |
| ABC (Chemical) | For all types of fire, including flammable liquids | Hallway fire hose cabinets |
| D (Chemical) | For combustible metals | See Lab Manager |
| <p>* = Classes: Class A - wood, cloth, paper, rubber, and plastic. Class B - flammable liquids, oils, greases, tars, oil-base paints, and flammable gases. Class C - energized electrical equipment. Class D - combustible metals such as magnesium, titanium, zirconium, sodium, lithium, and potassium.</p> | | |

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Extinguishers are inspected monthly by the Environmental Health and Safety Office to ensure that each extinguisher:

- is located in the designated place
- is not obstructed in access or visibility
- has visible operating instructions and nameplate
- has unbroken seals
- indicates pressure is in the operable range
- has no physical damage, corrosion or leakage

The inspection tag is dated and initialed for every inspection. Physical Plant coordinates annual extinguisher maintenance and periodic hydrostatic testing in accordance with OSHA 29 CFR 1910.157. The Lab Manager must be notified as soon as possible after an extinguisher has been discharged, so that it can be replaced and an accident report completed.

3.2 FIRE BLANKETS

Fire blankets are located throughout the laboratories. To use rolled blankets, remove the blanket from the cabinet and cover the victim to smother the fire. Do not wrap the blanket tightly around the body.

3.3 EYEWASH AND EMERGENCY SHOWER STATIONS

Emergency eyewashes are located at the south and north ends of the 2nd and 3rd floors, in the 1st floor environmental science/prep room, and in room B-2 in the basement. Emergency showers are located at the south and north ends of the 2nd and 3rd floors, in the basement, and in the 1st floor environmental science/prep room. The Lab Manager flushes eyewash stations weekly; and tests emergency showers semi-annually. Proper use of eyewash stations and emergency showers is demonstrated at the beginning of the semester during the safety talk for all laboratory courses.

3.4 FIRST AID KITS

First aid kits are located adjacent to the emergency eyewashes and showers, at the north and south ends of the 2nd and 3rd floors. The Lab Manager maintains the kits. Faculty are responsible for having portable first aid kits for use in the field at locations where medical services are not readily available.

3.5 SPILL CONTROL SUPPLIES

Spill response procedures are outlined in Section 2.2. Spill control supplies for use in cleaning up spills that can be controlled by laboratory personnel are located and contain the supplies as shown in Table 3-2. Please notify the Lab Manager when supplies are used so that they can be replaced.

| Table 3-2 SPILL RESPONSE SUPPLY LOCATIONS | |
|--|-----------------------------------|
| Basement | B 2 Prep Media Prep Room |
| First Floor | Prep Lab |
| Second Floor | Next to Stockroom |
| Third Floor | Lab Area next to Core 8 Fume Hood |

3.6 OXYGEN SENSOR IN B-16

The NRM room (Cole B-16) is equipped with a portable oxygen sensor that presents an audible and visual alarm if oxygen levels fall to 19.5% or increase to 23.5%. The GasBadge Plus meter remains on all the time and cannot be turned off. The screen indicates oxygen concentration in % volume. The meter must be left in the NMR room. Emergency procedures are described in Appendix 2-C.