

## Section 2 B

### B. Chemical Procurement, Distribution, and Storage

#### 1. Inventory:

It is recommended that a thorough inventory of laboratory chemicals be performed for each laboratory unit (see **Appendix C** of this manual). Once an inventory is present, it can be updated when new chemicals are procured, and when chemical stocks are consumed or old containers of chemicals are removed from the laboratory. Inventory control is an essential aspect of a proper, workable chemical management system in the laboratory.

#### 2. Procurement:

No container shall be accepted without an adequate identifying label (identity of chemical, hazard warnings, manufacturer's name and address). (Policy Reference - **WAC 296-62-05411, WAC 296-62-40015**).

It is strongly recommended that a person or persons be designated as responsible for acceptance or rejection of hazardous chemical substances brought into the laboratory. This designated person ensures that the chemical container is properly labeled, and does not permit the substance to be brought into the laboratory if improperly labeled.

No container of hazardous chemical waste may be transported into a laboratory from any other laboratory or room on- or off-campus. The person(s) responsible for acceptance or rejection of hazardous chemical substances must not permit any container of hazardous chemical waste to enter the laboratory. (Policy Reference - **WAC 173-303**) Exception: If a satellite accumulation area (SAA) is established outside a laboratory generation point, contact EH&S chemical waste management personnel (335-3041) for approval.

Peroxidizable chemicals must be dated when received into the lab and used or disposed of within the period specified in Appendix C of this manual.

(Policy Reference - **Lab Safety Manual Appendix C**)

#### 3. Distribution:

When chemicals are hand carried, the container should be placed in an outside container or acid-carrying bucket to protect against breakage and spillage (a secondary container). Freight-only elevators should be used, wherever possible.

#### 4. Laboratory storage:

It is strongly recommended that persons designated as responsible for accepting hazardous chemicals into the laboratory are also designated as responsible to ensure proper storage of hazardous chemicals. This responsibility is both for initial and for ongoing chemical storage.

- a. Hazardous chemicals should be segregated in a well-identified area and whenever practical, chemicals should be stored in vented cabinets. Chemical storage on bench tops is inadvisable.
- b. Highly hazardous chemicals should be stored in secondary containers that are chemically-resistant and unbreakable.
- c. Stored chemicals should be examined periodically (at least semi-annually) for deterioration and container integrity. Deteriorated containers should be replaced to prevent uncontrolled chemical releases/spills.
- d. The amount of chemicals permitted for storage should be as small as practical.
- e. Exposure of chemicals to heat or direct sunlight should be avoided.
- f. Less-toxic chemicals should be substituted for highly toxic chemicals wherever possible.
- g. Fume hoods are not intended for the storage of chemicals. Newer fume hoods with two-speed fans are designed to provide adequate air velocity for storage of small amounts of chemicals. Chemicals stored in fume hoods should be kept to a minimum and should not block baffle exhaust slots or alter airflow patterns. Fume hoods used to store these small amounts of chemicals should be operated 24 hours a day, 7 days a week.
- h. Flammable liquids should be stored in ventilated flammable storage cabinets.
- i. Containers of hazardous chemicals or hazardous chemical wastes should not be stored on floors, especially in areas in which traffic may result in breakage or spillage of the container.
  - j. Additional information on storage guidelines for incompatible chemicals is in **Appendix C** of this Plan.

