



## Radiation Safety

Serving Stony Brook University,  
Stony Brook Medicine,  
& Article 28 facilities

# Radioactive Waste Flow Chart

- Separate long-lived and short-lived isotopes
- Attach 'Caution Radioactive Materials' Sticker
- Shield all waste to < 2mR/h
- Maintain a waste log for each container



### Liquids

Homogeneous and is "pourable".  
No solid materials present, such as pipette tips, microcentrifuge tubes, etc.

### Liquid Scintillation Vials

Liquid scintillation cocktails and associated containers such as counting vials.

### Sharps

Hypodermic needles, syringes, scalpels, broken glass, and razor blades.

### Solids

Small amounts damp materials may be present. No pourable liquids.

#### Hazardous

Flammable  
Corrosive  
Reactive  
Toxic

#### Non-Hazardous

Dissolved in water or evenly distributed in a liquid which is mainly composed of water.

Store in chemically compatible non-breakable container placed in a secondary containment. Attach orange hazardous waste sticker to indicate the contents.

Store in a carboy placed in a secondary containment. Attach orange hazardous waste sticker to indicate the contents.

All liquid scintillation vials should be put into a lined LSV drum supplied by RS. Record the type of scintillation cocktail used on the orange hazardous waste sticker.

Place in approved puncture resistant sharps container with biohazard label

#### Dry

Paper, plastic, microcentrifuge tubes, glassware, empty vials, gloves, etc.

Place in drum or bucket lined with a plastic bag.

#### Lead

Pigs  
Bricks  
Sheets  
Aprons

Place all lead in an appropriate container for pickup. If contaminated, place in a plastic bag and label with the isotope.

#### Animal

Carcasses  
Tissue samples  
Excreta Blood

DLAR procedure  
  
Label bag with Lab name, isotope, Date, dose rate at surface. Place in Cold room and inform RS.

### Long-lived isotopes: Half-life > 90 days

- Must be disposed by outside vendor.
- Contact RS for waste pick-up.

### Short-lived isotopes: Half-life < 90 days

- Decay in storage for 10 half-lives.
- Must be surveyed and approved before disposal.