



Radiation Safety

Serving Stony Brook University,
Stony Brook University Hospital,
& 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.

Dry

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

Lead

Pigs
Bricks
Sheets
Aprons

Animal

Carcasses
Tissue
samples
Excreta Blood

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

Place in
drum or
bucket
lined with a
plastic bag.

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

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.