Radioactive Waste

Segregate isotopes by "half-life" class. Only one class of waste radionuclide may be placed in a single container. See note below.

Liquid waste

Liquid scintillation fluors/vials

Approved Fluors (call if using others)
BetaMax
CytoScint ES
Ecolite
Ecolume
Ecoscint
Optifluor
ReadySafe
Safescint
Ultima Gold & Flo
Universol ES

Place LSVs in 11 or 30 gallon drums (and only LSVs) . Label drum with isotope(s) collected in drum. Affix radioactive waste tag to top of drum. Specify fluor used on tag.

Chemically hazardous

(radioisotopes that are dissolved in an organic solvent)

Collect in 1 gallon jugs or 5 gallon carboys. Label jug with isotope(s) collected in jug. Store jugs in bins or trays to catch spills. Complete one radioactive tag per container identifying the isotope and all liquid components (must add up to 100%). Add the words "Hazardous Waste" to the tag to indicate it is also a chemical hazardous waste.

Chemically non-hazardous

(radioisotopes in an aqueous (water based) solution where pH can be adjusted between 5.5 and 9.5)

Collect in 1 gallon jugs or 5 gallon carboys. Label jug with isotope(s) collected in jug. Adjust pH of waste to between 5.5 and 9.5. Store jugs in bins or trays to catch spills. Complete one tag per container identifying the isotope and all liquid components (must add up to 100%).

Sharps waste

(including all plastic pointed items such as pipettes and blood contaminated vials and labware)

Place in yellow or red radioactive sharps container labeled with isotope(s) collected in container. Full sharps containers should then be placed in appropriate (same class) dry box. Isotope content and activity must be accounted for on the dry box waste tag. Sharps that are both radioactive and biologically contaminated must be autoclaved or chemically treated prior to placement in box.

Dry/Solid waste

Dry waste

(such as paper towels, gloves, mats and plasticware)

Place in one of three sized bag/box units. Label box with isotope(s) collected in box. Affix completed radioactive waste tag to bag. Full sharp containers and empty stock vials may be placed in dry waste of the same class.

Note: Never place any of the following in a dry waste container: liquids, blood products, loose sharp objects or lead.

[empty] Place in separate plastic bag before adding to dry waste

[not empty]

Stock vials

Vials still containing stock solution should be placed in a sealable plastic bag with a radioactive sticker and a radioactive waste tag.

[Pb shielding]

Lead shielding

Place all lead in a plastic bag and tape closed. Tag the bag with a radioactive waste tag if contaminated or label as uncontaminated lead.

Animal carcasses, tissues and excreta

Place carcasses in plastic bag and then in brown kraft bag. The carcass should be frozen 24-48 hours prior to pickup. Animal carcass, tissues, bedding, excreta may be placed together in the same bag for the same animal. Tag the outermost bag with a radioactive waste tag.

Note: Only one class of waste radionuclides may be placed in a single container.

Class 1 - Radionuclides with a half-life less than or equal to 15 days (^{32}P)

Class 2 - Radionuclides with a half-life greater than 15 days and less than or equal to 60 days (^{33}P, ^{125}I, ^{51}Cr, ^{86}Rb)

Class 3 - Radionuclides with a half-life greater than 60 days and less than 120 days (^{35}S)

Class 4 - ^{3}H and ^{14}C

Class 5 - Radionuclides with a half-life greater than 120 days other than ^{3}H and ^{14}C (^{55}Fe, ^{22}Na, ^{36}Cl, ^{45}Ca)