

How do I dispose of my radioactive waste?



Radiation Safety Office

"How do I...?" Guide

Before you request a Radioactive Waste pickup you must have the materials and paperwork in order. The Regulated Materials Management Center (RMMC) may refuse to pick up waste if it is not properly packaged, labeled and documented. If you have any questions, please call 766-3697.

1. Use leak-proof, well-sealed waste containers:

- a. Liquid waste: 20-liter carboys are available at the RMMC free of charge. If labs do not dispose of large amounts of liquids the RMMC will try to work something out. Waste will not be accepted in containers that are not authorized by the RMMC.
- b. Solid waste: All solids should be kept out of the liquid waste. The RMMC supplies 5 gallon plastic buckets with lids for solid waste. Otherwise, lightweight waste should be double-bagged, and sharps and other bulky waste should be placed in boxes or jars.

2. **Separate hazardous waste from other waste:** An example is scintillation cocktail with toluene. Leave the liquid in the vials and place them in a separate waste container. Lead is also a hazardous waste, so lead pigs should not be combined with the other solid waste.
3. **Don't mix isotopes:** Waste with half-lives less than 120 days can be disposed as non-radioactive after decayed to background levels. All others must be packaged for off-site disposal (at a cost to your department). It is expensive to mix P-32 or I-125 waste with H-3 or C-14.
4. **Don't over-fill waste containers:** Jugs that are more than 80 percent full are difficult to transfer without spilling. Bags and other containers should not be filled to the point that they rupture or are difficult to tie. When a container is sufficiently full, a new one should be started.
5. **Label all containers with the radiation symbol and the words "Caution, Radioactive Material":** In addition, write the users name, isotope, activity (in mCi), and date on each container. Also indicate any other chemical or physical hazards (for example, "scintillation vials with toluene or "sharps").
6. **Completely fill out the Radioactive Waste Container Summary form(s):** www.uwyo.edu/safety/files/Docs/Forms/RadioactiveWasteContainerSummary.doc One form for each radionuclide must accompany the waste. Make sure to include all the information requested (see the instructions also on the web site).
7. **AFTER you have all of the above completed, NOW you should request a pickup:** Fill out the disposal request on our web site (<http://www.uwyo.edu/serverreports/HazPickUp.aspx>). If you do not have access to the internet, you can call the RMMC at 766-3697. Information on the kind of waste, how many containers and whose lab it is from should be provided. All waste and paperwork should be ready when the crew arrives. Sometimes tight schedules don't allow time for them to help fill out forms or wait around while someone does it.