

RADIOACTIVE WASTE DISPOSAL

CPT CODE: N/A

UPDATED: JULY 2013

Purpose: The purpose of this protocol is to identify the process of radioactive waste disposal. This protocol allows us to follow the Wisconsin Department of Health Services (DHS) Chapter 157.30 regulations.

Categories: Wastes should be categorized by half-life category (Short, Medium, and Long) as follows:
Short= 0-13 hrs (i.e. Tc-99m, F-18, N-13)
Medium= 13 hrs-5days (i.e. I-123, Ga-67, Tl-201, In-111)
Long= 5 days-8.04 days (i.e. I-131)
Extra Long= >8.04 days (i.e. Co-57, Sr-89)

Procedure: All processes for waste disposal take place within Nuclear Medicine Information System (NMIS). Please refer to the NMIS Information Guide for basic information of the waste disposal process.

Opening a new radioactive waste bin to be used for radioactive waste within the department:

1. A new bin must be labeled with the ID number and appropriate half-life category. Then it is placed into a work area within the department and radioactive waste is then placed within that bin. (Bin label will be similar to Short-xxx, Medium-xxx, etc)
2. Hot Lab Management---Disposal---In-House Disposal
Click on New Bin---Select Half-life category---then click OK
(To print label right click on bin and select print bar code label)

Closing a radioactive waste bin to be stored until at or below background limits:

1. Once a bin is filled it must be labeled with the date closed and placed in E1/381 within the appropriate half-life lead lined storage areas. When this happens that bin must be placed within the decay in storage portion in NMIS.
2. Hot Lab Management---Disposal---In-House Disposal
Right click on bin and then select Decay Storage
Indicate on bin the date of the bin being closed
Place bin in appropriate lead lined storage area in E1/381

Final disposal of a radioactive waste bin to be disposed of as medical waste:

1. After approximately 10 half-lives, depending on the half-life category, the bin should be monitored. If still not at or below background the bin should be placed back into storage and checked again at a later time. If it is at or below background limits the bin should be placed into final disposal within NMIS. That bin should then have all radioactive identifiers defaced and should be disposed of using standard medical waste procedures.
2. Hot Lab Management---Disposal---In-House Disposal
Right Click on bin and then select Final Disposal
Enter survey meter information. Then enter bin survey results.
In the comment field enter what the final disposal was. (i.e. normal trash, biohazard disposal or transferred to UW Radiation Safety.)

Reviewed By: S. Perlman, D. Fuerbringer, J. Macatangay, T. Kes



Scott B. Perlman, MD, MS
Chief, Nuclear Medicine



Derek Fuerbringer, CNMT
Manager, Nuclear Medicine



~~Jose Macatangay, MS~~
Radiation Health Physicist (temp)
Scott Krishler BCMP