



Veterans
Administration

Date May 18, 1981

Memorandum

To: RADIOISOTOPE USERS

Subj: DISCUSSION OF RADIOACTIVE WASTE HANDLING
PROCEDURES

1. The attached material represents new, revised, and ongoing radioactive waste handling procedures for VA Wadsworth and Brentwood Medical Centers.
2. In order to insure a complete understanding of these procedures, it is necessary to meet with all parties concerned. This meeting will be in the Bldg. 114, Rm. 125 Conference Room, on June 4, 1981, from 1:30 to 3:30 pm. Please bring the enclosed material with you. Attendance by you or a designee is mandatory.

L. W. Wetterau

L. W. WETTERAU
Radiation Safety Officer
Nuclear Medicine Ultrasound Service (691/115)

Attachments

B204150391 B20216
PDR FOIA
NELSON82-11 PDR

RADIOACTIVE WASTE PROCEDURES

- I. Recent NRC rule changes permit individuals greater leeway in disposal of radioactive materials, under controlled conditions (see attached copy of 10-CFR-20).
 - a. Investigators must maintain an isotope log showing receipt, transfer, use and disposal for each radioactive compound in their possession. These logs will be reviewed quarterly and disposals will be recorded in quarterly inventory reports.
 - b. Reporting of sewerage disposals is mandatory because VAWMC is limited to total quantities as follows:

H-3 = 5 Ci/yr
C-14 = 1 Ci/yr

All others in the aggregate = 1 Ci/year
 - c. Sewerage releases must be done with due care to reduce splashing. Releases must be accompanied by a copious water flush.
- II. Certain waste may be disposed without regard to its radioactivity provided the following criteria are met:
 - a. 0.05 uCi or less of H-3 or C-14/gm of medium used for LSC operations.
 - b. 0.05 uCi or less of H-3 or C-14/gm of animal tissue averaged over weight of entire animal, provided that any animal so disposed does not enter the food chain for humans or animals.
 - c. Records of receipt, transfer and disposal must be maintained.
 - d. All applicable Federal, State, and local regulations governing disposal of toxic/hazardous materials must be met.
- III. Wastes arising as a result of I-125 RIA activities may be disposed under the provisions of our decay in storage license provisions provided that the following conditions are met:
 - a. Materials to be decayed, monitored and disposed of must be delivered to radioactive waste storeroom.
 - b. RIA tubes must be emptied of all liquids. Liquids may be transported to storeroom in covered plastic wide-mouth jars.
 - c. Laboratories must provide personnel for monitoring, logging, and disposal activities.
 - d. Liquid wastes from iodination-separation procedures must be treated according to the attached procedure - Custer et al.

IV. Waste Monitoring and logging flow sheet

a. RIA wastes - I-125 - Monitor and log

If it reads < 0.05 mr/hr, liquids can go down drain, dry tubes to regular trash. Obliterate radioactive labels.

If above 0.05 mr/hr, fluids must be assayed, decayed or absorbed. Dry wastes must be bagged, labeled and decayed, or compacted in radiowaste facility.

b. LSC vials, monitor and log

< 0.05 uCi/gm medium H-3/C-14 hazardous chemical waste. Dispose via Research Service Safety Officer.

> 0.05 uCi/gm medium H-3/C-14 and all other radioisotopes such as P-32, Ca-45, S-35, etc. Dispose in radiowaste facility.

c. Animal remains, monitor and log

< 0.05 uCi/gm of carcass containing H-3/C-14 - can dispose as nonradioactive provided carcass does not enter human/animal food chain

> 0.05 uCi/gm of carcass, all radioisotopes. Can be disposed only by special arrangement with Radiation Safety Officer

d. Animal fluids will be handled in the same manner as item C, with prior consultation with the Radiation Safety Officer.