

MEMORANDUM

TO: All Radioactive Materials Licensees DATE: November 15, 1993

FROM: William B. Bass
Radiation Safety Officer

SUBJECT: Mandatory Radioactive Waste Minimization Program

In an effort to reduce radioactive waste and comply with the state and federal regulations, the Radiation Safety Division (RSD) has had a mandatory waste minimization program for several years. It has proven to be effective and we thank you for your efforts to reduce the radioactive waste generated in your research. Your help has eased the physical and financial burdens of waste storage and disposal.

As UAB continues to grow, the space for radioactive waste storage and holding is now at a premium and forcing us to again review the program to make further reductions. After an extensive review, it was noted that the RSD does not have a documented radwaste minimization program on file for each licensee.

Enclosed is a list of the possible ways you and your researchers can minimize the radioactive waste generated in your laboratory. Please study it and place a check mark beside the methods that are reasonable and applicable to your radioactive materials use program. Return the document to the Radiation Safety Division, 445 CH19-2041 by December 31, 1993.

Your signed waste minimization program will become a part of your radioactive materials license and reviewed during our routine audits of your radiation safety program.

Thank you in advance for your cooperation and prompt response.

WBB/sr

**METHODS UTILIZED BY LICENSEE IN
THE MANDATORY RADWASTE MINIMIZATION PROGRAM**

1. _____ Order radioactive materials in quantities that are necessary in a series of clinical tests or experiments, while observing the expiration dates of the chemical forms used.
2. _____ Guard against unnecessary contamination of solid nonradioactive materials by:
 - _____ Preventing radioactive liquid spills from containers or needles.
 - _____ Restricting the size of the radioactive material use area to reduce the amount of bench paper used.
 - _____ Preventing radioactive liquid spills during transfer from one work area to another.
 - _____ Monitoring and separating nonradioactive materials from radioactive ones (i.e., disposable protective gloves that are not contaminated should be thrown into regular trash).
3. _____ Avoid mixing liquids of high specific activity with ones of low specific activity.
4. _____ Avoid mixing highly contaminated solid radioactive waste with low activity waste.
5. _____ Evaporate nonvolatile radioactive liquids in fume hoods.
6. _____ Use trapping media, such as solid Dowex beads and/or 0.22 micron filters, to filter radioactive materials and minimize the amount of activity collected in waste liquids.
7. _____ Develop a program for the safe use, placement and identification of special collection containers when using or handling radioactive sharps.
8. _____ Use a core facility to perform radioiodinations and minimize releases of radioiodine to the environment and liquid waste.
9. _____ Use properly filtered ovens, not autoclaves, to neutralize infectious volatile radioactive waste.
10. _____ When possible, use one of the biodegradable liquid scintillation counting solutions.

Radioactive Materials Licensee Date