

Quick Reference Guide

Radiation Controls: (Sections 4 and 7)

Exposure Limits

Rad Worker Whole Body	5 rem/year
Rad Worker Extremity / organ	50 rem/year
Non-rad worker whole body	0.1 rem/year
Dose to Embryo (Declared Pregnancy)	0.5 rem/term

Controlled Zones

Contaminated Area Beta / gamma (excluding Tritium (³ H))	500 dpm / 100 cm ²
Contaminated Area Tritium (³ H)	1000 dpm / 100 cm ²
Radiation Area (1 rem/hr = 1,000 mrem/hr)	5 mrem/hr ≥30 cm
High Radiation Area (1 rem/hr = 1,000 mrem/hr)	100 mrem/hr ≥30 cm

Purchase of Radioactive Materials: (Section 6)

1. Before placing the order, you must have a RSC approved / signed form HP-1 (Appendix IX)
2. You can not use a PROCARD to purchase Radioactive Materials!
3. Ship to: Hazardous Materials Stock Room,
ATT: Rad Safety Office
201 Riverside St.
Lowell, MA 01854

General Use of Radioactive Materials: (Section 7)

1. Record the removal of the radioactive material from stock solution. (Form AU-1 or equiv't)
2. Have a certified portable radiation survey meter readily available. (Appendix VIII)
3. Use proper and safe work habits and wear appropriate dosimetry. (Appendix III)
4. Properly handle and store any radioactive waste generated (Section 8)
 - a. LSC fluid concentrations ≤0.05 μCi/ml is treated as stable, chemical waste.
 - b. Stable waste measures ≤ 2x background (low background area and use of high sensitivity instrument).
5. At the end of the experiment, perform applicable contamination / field survey. (Section 7: Radiation Monitoring)
 - a. Record the results of the survey. **This record must be kept on file at the laboratory.** (Appendix VII)
 - b. If area is a Contamination Area (Section 7: Control Zones) contact Radiation Safety Office at x43372 or x43373.
 - c. If area is a Radiation Area (Section 7: Control Zones) contact Radiation Safety Office at x43372 or x43373.

Records Required to be Maintained by Laboratory: (Section 7)

1. Radioactive Source Inventory (form AU-1 or equivalent)
2. Radiation Survey Results (contamination / field) (form AU-2 or equivalent)
3. Radioactive waste inventory (form AU-1 or equivalent)

Radiation Safety Office Contact Information:

Director, RSO
Pinanski Room 103a
Phone: x43373

Assistant RSO
Pinanski Room 103
Phone: x43372