UTHSC – Radiation Safety Committee Policy

Security of Radioactive Materials

Policy Statement: It is the policy of the UTHSC that radioactive materials shall be secured from unauthorized access or removal commensurate with the risks posed by loss or misuse of the material, in accordance with regulations established by the State of Tennessee.

Implementation:

Security of Material in Laboratories:

Licensed material shall in general be secured from unauthorized access or removal. Only those authorized to use the material should have access to it. A current inventory of radioactive materials shall be maintained and should be located at or near the storage locations of the material.

Acceptable methods of securing stock solutions include the following:

- Locked storage location (e.g. refrigerator/freezer, room)
- Locked box secured inside of a storage location
- Surveillance of radioactive material by a trained and authorized individual.
- Other methods that provide an equivalent level of oversight at the discretion of the RSO.

Small quantities of materials that are not readily disperseable (e.g. dry waste consisting of contaminated gloves and papers) may be stored in a laboratory which is unlocked and unattended for brief periods during normal business hours, provided that they are clearly labeled and adequately shielded.

All labs where radioactive materials are stored (samples, waste, stock solutions, etc.) should be locked when not attended and shall be locked when not attended during off-hours.

Radioactive sources installed within equipment and distributed under a general license shall be considered secure by virtue of their inaccessibility within the device (e.g. internal standards for liquid scintillation counters).
External calibration standards for liquid scintillation counters will be considered exempt from these security requirements due to the general lack of risk associated with them. Such standards however should be inventoried and accounted for by the laboratory.

Liquid Scintillation waste that would be considered exempt from treatment as radioactive waste shall be exempt from these security requirements provided it is properly labeled.

**Security of Material in Animals:**

Animals that have been administered radioactive materials are housed either in secured radioactive materials laboratories, or in one of the UTHSC animal facilities. Such facilities have restricted access. In addition, the low quantities typically injected and distributed through the animal (and associated bedding, etc.) do not pose a serious risk from nefarious use. All cages or other enclosures which house radioactive animals are labeled with appropriate warning signs to alert area personnel to the hazard. It is the general policy of UTHSC that radioactive animals and related contaminated materials are only handled by specially trained laboratory personnel.

**Security of Material in Transit:**

All radioactive materials in transit within the confines of UTHSC shall be attended by an appropriately trained worker at all times. Materials shall only be released to individuals authorized to possess them (e.g. AU or radiation worker under the authority of an eligible AU). Special dispensation may be made at the discretion of the RSO provided that there is a demonstrable need and that all personnel receive appropriate training in function specific topic areas including this policy.

**Enforcement:** Violations of the security policy will be handled according to the Radiation Safety Committee Violation Policy.