

## V. Decontamination

### A. Equipment Decontamination

1. The RSO/RSS should be contacted for assistance in all radiation decontamination procedures.
2. The easiest way to solve the problem of equipment contamination is to use procedures that prevent the contamination initially. Sometimes equipment can be protected with plastic or other types of containment that will prevent contamination.
3. If biological materials are involved, the biological decontamination or sterilization must be performed before radiation decontamination. Biological treatment consists of placing the equipment in nonporous containers and then either autoclaving, treating with ethylene oxide, or utilizing methods approved by the Biological Safety Office.
4. The maximum permissible contamination levels for alpha and beta-gamma radiation are 10 and 500 disintegrations per minute, respectively, for an area of 100 cm<sup>2</sup>. These limits are for removable contamination. The definitions for removable and nonremovable contamination are listed below:
  - a. **Removable contamination:** Any contamination that may be removed with routine cleaning using such cleaning agents as Count-Off™ or soap and water, and paper towels. Removable contamination should leave no trace behind, and equipment should be below the limits listed above or at background radiation levels after cleaning.
  - b. **Nonremovable contamination:** Any contamination detected above background limits listed above after proper cleaning. Nonremovable contaminated equipment requires labeling with radioactive tape stating the isotope, dpm, and date of contamination.
5. The individual responsible for the contamination will be expected to do most of the cleanup under the supervision of the RSO/RSS.