

Johns Hopkins Safety Manual	<i>Policy Number</i>	HSE 907
<i>Subject:</i>	<i>Last Review Date</i>	09/23/08
Contamination Limits And Decontamination Procedures	<i>Page</i>	1 of 1

1. Permissible Levels of Radioactive Contamination

The permissible levels of removable radioactive contamination on hoods, bacteriological cabinets, laboratory benches, other working surfaces, floors and other areas shall not exceed the following limits:

Type of Surface	Type of Radioactive Material			
	Alpha Emitters		Beta or Gamma Emitters	
	dpm/100cm ²	Bq/cm ²	dpm/100cm ²	Bq/cm ²
Restricted areas	220	3.7x10 ⁻²	220	3.7x10 ⁻²
Personnel clothing worn outside restricted areas	22	3.7x10 ⁻³	220	3.7x10 ⁻²
Protective clothing worn only in restricted areas	220	3.7x10 ⁻²	220	3.7x10 ⁻²
Unrestricted areas	22	3.7x10 ⁻³	220	3.7x10 ⁻²
Skin	22	3.7x10 ⁻³	220	3.7x10 ⁻²

The permissible levels on glassware, tongs, lead bricks, and other laboratory equipment will be the same as those for working surfaces; however, it is expected that, in certain instances in which such equipment is to be used over again in radiological operations, contaminated equipment will be present and is permissible as long as it is appropriately labeled and stored separately from uncontaminated equipment.

To insure that these levels are maintained, the Authorized User will perform routine surveys of all areas under his control. Any contamination that is not confined to protected surfaces and cannot be decontaminated shall be reported immediately to the JHMI Radiation Control Unit. The JHMI Radiation Control Unit will supervise the decontamination of such areas of equipment.

Fixed contamination in restricted areas shall be kept as low as reasonably achievable and low enough so that dose limitations are not a concern.

2. Decontamination of Areas Contaminated with Radioactivity

Preparations for decontamination shall be started promptly. Determine the extent and hazard of contamination. The JHMI Radiation Control Unit will assist in this evaluation. The individual responsible for the contamination will be expected to do most of the cleanup under the supervision of the JHMI Radiation Control Unit. After decontamination, the area or equipment shall be considered contaminated until proved otherwise by the JHMI Radiation Control Unit.

3. Decontamination of Personnel Contaminated with Radioactivity

3.1. Notify the JHMI Radiation Control Unit immediately after the contaminating accident.

3.2. Wash body involved thoroughly for 2 or 3 minutes, repeatedly, "soaping" and rinsing. Consideration should be given to the chemistry of the contaminant and an attempt made to find a suitable agent for dissolving it. Any cleansing agent may be used, but synthetic detergents are preferred to soaps. Avoid prolonged use of any one decontamination procedure. Irritation to the skin may impede the success of more suitable procedures. Avoid the use of organic solvents. They may make the skin more permeable to radioactive contaminants.

REVIEW CYCLE

Every three years.