

INSTRUCTIONS FOR CONDUCTING POST-EXPERIMENT CONTAMINATION SURVEYS

Users of radioactive material must conduct a contamination survey of the radioactive material work area and themselves at the completion of work every day that they handle radioactive materials. All work surfaces and items that may have become contaminated during the course of the day must be surveyed. The floor in the vicinity of the work location must also be surveyed. The user must know the results of the survey and clean any contaminated area/item before leaving the lab for the day.

For these Radionuclides...	... Follow this Survey Technique
H-3, C-14, S-35, P-33, Ca-45, Fe-55	Wipe Test
P-32	Meter Scan with thin-window GM (Geiger) detector (or Wipe Test)
I-125	Meter Scan with low-energy gamma detector (or Wipe Test)
Others	Check with Radiation Safety Officer

Wipe Test: Areas/items to be tested are wiped using either a dry wipe or cotton swab using moderate finger pressure. An area of approximately 100 square centimeters is wiped. Wipes are analyzed using a liquid scintillation counter. Those wipes with a count exceeding twice the background count are considered contaminated and the corresponding area must be cleaned and re-surveyed.

Meter Scan: Areas/items to be tested are slowly scanned with the meter by holding the meter probe at distance of approximately 1 cm or closer to the tested area/item. Those areas with a count rate exceeding twice that of background are considered contaminated and must be cleaned and re-surveyed. Prior to using a survey meter to survey for contamination, (1) use the "battery check" feature of the meter to ensure battery strength is satisfactory and (2) hold the probe near a known source of radiation to confirm that the meter will respond when exposed to radiation.

At the conclusion of the contamination survey, lab staff must document the results of the survey in the lab radiation record book.

The Radiation Safety Officer must be promptly notified in the following cases: contamination found in public areas, contamination is wide-spread throughout the lab, unusually high levels of contamination are found, contamination found on the skin.