

# ***Employee Training***

## ***Contamination Wipe Tests***

1. All areas where radioactivity is handled, used, prepared, and stored should be wipe tested weekly for removable contamination. Additionally any area of suspected contamination shall also be wipe tested to limit the possible uncontrolled spread of radioactive material.
2. All values will be recorded in disintegration's per minute (dpm)/ per 100 cm<sup>2</sup>.
3. All wipe tests will be analyzed with a detector of sufficient sensitivity to detect the trigger levels noted below, i.e., (well, uptake, uncollimated camera).
4. Trigger levels for removable contamination:  
  
**200 dpm/ per 100 cm<sup>2</sup> for I-131, P-32**  
  
**1000 dpm/ per 100 cm<sup>2</sup> for all other radionuclides.**
5. Wipe tests results greater than the trigger levels will result in the initiation of the decontamination procedure to reduce contamination levels ALARA or below the trigger level on repeat wipes. As an alternative, the area affected may be covered to prevent the spread of contamination until decay below trigger levels. Additionally the area may be posted and restricted from use.
6. A record shall be kept of all wipe test results. The record should include:
  - a. Location, date, and type of equipment used.
  - b. Initials of the person conducting the wipe test.
  - c. Drawing of the wipe area tested.
  - d. Trigger levels keyed to the locations on the drawing.
  - e. Results keyed to the locations on the drawing.
  - f. Corrective actions taken in case of contamination.
7. The method for determining the wipe test values in dpm's is as follows:  
  
A = Calculated source activity of sample isotope in dpm  
B = Measured source counts of sample isotope in cpm  
C = Measured background counts in cpm  
D = B - C (Net Counts in cpm)

$$\text{Efficiency Factor} = \frac{\text{Calculated Activity in dpm (A)}}{\text{Net Counts in cpm (D)}} = \text{dpm/cpm}$$

$$\text{Wipe Sample-dpm} = (\text{Net Counts of Wipe Sample}) \times (\text{Efficiency Factor})$$

8. The RSO will be notified of all positive wipe test and ambient survey results.

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Radiation Safety Officer

\_\_\_\_\_  
Administrator

Date: \_\_\_\_\_

Date: \_\_\_\_\_